UNIVERSITY OF LONDON

UNIVERSITY COLLEGE ANNUAL REPORT 1975-1976

UNIVERSITY COLLEGE
LONDON

CONTENTS

Foreword by the Provost 5
The Report for 1975–76 (with Supplement) 14
Publications by Members of College Departments:
Faculty of Arts 41
Faculty of Laws 56
Faculty of Science 59
Faculty of Engineering 90
Faculty of Medical Sciences 99
Faculty of Environmental Studies 110
Computer Centre 112
The Library 112
Health Centre 112

Appendices:
I College Committee 113
II Professorial Board 114
III Honorary Fellows and Fellows 119
IV Public Lectures 120
V Numbers of Students 122
VI Geographical Distribution of Students 123
VII Admission of First Degree Students 124
VIII University First Degree and Diploma Awards .. 126
IX University Higher Degree and Higher Diploma Awards 128
X College Diploma and Certificate Awards 132
XI Scholarships, Studentships, and Prizes: College and University Awards 135
XII Benefactions, Donations, Research Grants and Contracts 140
XIII College Accounts 154

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FOREWORD BY THE PROVOST

Our country needs a new Education Act. The Butler Act of 1944, which was designed to give every child education suited to his or her abilities, was a wonderfully flexible piece of legislation. It accommodated all the changes in the past thirty years, from a time when we spent on education 1·7 per cent of the GNP to this year when we shall spend 7 per cent. It enabled bigger sixth forms to grow and out of that growth came the demand for the vast expansion of higher education in all its forms—from the day-release scheme in further education colleges, for those who left school at the earliest possible moment, to the multiplication of universities and the creation of polytechnics. The Butler Act also opened the way to many educational experiments, not only in the curriculum, but experiments which challenged the nature of State education as it had hitherto been known.

But the Act is now out of date. The long argument about comprehensive education is virtually over. Secondary schools are going to be either comprehensive or, buttressed by the United Nations resolution of the right of every parent to educate his child in a private school, independent. Expansion is at an end. For at least a generation we shall see no more new institutions being founded and no more vast new building programmes in the schools or in higher education: we shall not even keep pace with obsolescence. For better or worse, the pattern of institutions which we now have will be with us into the twenty-first century. If the birth rate continues along the downward curve of the last ten years, we shall see schools and colleges shut, as in the present case of the colleges of education, rather than multiplied. Education these days resembles one of those businesses which grew up in the fifties, the creation of some dynamic entrepreneur, who has now retired and inevitably has been replaced by a canny accountant, who has had to sort out the priorities, cut the fringe activities, rationalise and consolidate, rather than innovate or conquer new empires. Whether one is Secretary of State or a Chief Education Officer, whether one works in a primary school or a university, economy and cuts are today's lot. Why then do we need a new Education Act?

We need a new Act because for twenty years the fundamental questions in education have been passed by. Or rather most of them have been forgotten while we tried to answer one major question: how to widen social, and hence educational, opportunities. Our problems in secondary education are not whether we should go

comprehensive. They are the problems of secondary education all over the Western world.

But, in fact, throughout the schools, there is no clear policy or agreement on how we teach, what we teach, why we teach, or even whether we should assess what has been taught. There is no policy, either nationally or locally, on how to match the curriculum, and hence the places, in tertiary education to job opportunities and the nation's needs. The Schools Council is an inadequate body, too much at the mercy of sectional interests, to undertake the reforms in secondary education which today are needed.

For the reforms needed are nothing less than a new policy, worked out in regulations and requirements, to preserve and raise the level of academic attainment. Whatever Chief Education Officers or the NUT may say, industry, business, banks, and others who take in the leavers from schools and tertiary education, declare that school-leavers are less able to calculate and write clear English than they were; the numbers of those who study foreign languages are declining with appalling speed; illiteracy is more widespread than it was; and in interviews applicants for jobs are less able to speak cogently and concisely. These are the people who declare that standards are declining. Such is the evidence which comes from dozens of candid teachers; and the UGC itself spoke of students arriving at universities of adequate ability but inadequately equipped with the skills and knowledge needed to pursue their courses profitably.

What do such people mean? In one sense children are better educated. Boys and girls today are more able to discuss, more ready to voice opinions, more open to new ideas than they were forty years ago, and they have a better visual sense. Compare a Higher Certificate paper in Chemistry in 1936 with an A level paper in 1976: the latter is far more complex and demands less reliance on memory and more on analysis. One of our Engineering Departments has said that the 1975 intake was the best they had had for thirty years. Furthermore, the still sizeable intake to some universities, such as our own, of students from independent and the former large direct grant schools contains highly trained minds.

But against this are the bleak facts that manipulation in mathematics, accuracy in the humanities, and clarity in expressing oneself in one's own language have all declined. The mental horizons are wider, but the thinking is sloppier. In the last fifteen years, university type institutions have increased and now number 80–90; the Open University is established; 100 Colleges of Education exist; and further education and technical colleges have all expanded. But

this expansion of higher education drained away many of the best teachers of the future from the secondary schools. The *rate* of expansion has been out of all proportion to the nation's means, either in money or in human beings: all the more serious when it becomes less possible for local authorities or universities ever to get rid of an incapable teacher. These deficiencies do not arise from comprehensive schooling. In Conservative as well as in Labour controlled areas (for example, in Oxford and Cheshire as well as in Wales and Yorkshire) comprehensive schools work well. But, as in America or in parts of Europe, in places where the population is not homogeneous, and in the big cities where the gifted poor child is compelled to go to a neighbourhood school in which teachers are hard put to it even to keep order, it is not a question of spreading butter even thinner over the bread; it is a question as to whether there is any bread.

There is another ominous cloud hanging over us. Already, it is the custom in some schools to eliminate competition, evade exams and regard the pursuit of intellectual excellence as if it led to venereal disease: cleverness, energy and ability are discouraged, and docile co-operation (and unendurable dullness) are celebrated as the most desirable traits in personality. It looks, however, as if the Department of Education and Science has rumbled the Schools Council plan for a common system of school leaving examinations, a proposal which the universities regarded with the deepest suspicion. We suspected that the end of O levels would then be followed by an assault on A levels. Nor are we oblivious of the tiny handful of teachers to be found at all levels of the education system, in universities as in primary schools, who try to sabotage the curriculum and exams and the style of teaching, allegedly in the interests of social reform, but in reality in the interest of furthering that myth of extremists, '*the* revolution', which miraculously is going to be unlike any other revolution and will be disinterested, just and pure.

We need a new Education Act to insist on minimum national standards at different ages in the three R's. It is beyond dispute that this could be done in arithmetic and reading; and only educationists would dispute that it could be done in judging how able a child is to write clear English. These minimum standards would be established through national exams to test progress and therefore to identify and help the slow learners. They would not be tests like the 11 plus, or indeed GCE and CSE, which are connected with advancement. They would be tests not so much of the children as of the schools. It is also time that both the universities and the polytechnics were prepared to

insist that their voices be heard in the matter of the secondary school curriculum. That curriculum is bedevilled by the vastly inflated number of options which can be taken in public exams. Here again, we need a core curriculum which every child must take, consisting of the writing of English, the ability to calculate and manipulate numbers, and a European language.

We need a new Education Act to look after the interests of the educationally sub-normal. Is it any wonder that our industrial skills are so low, when in 1962 the number of day-release students was a quarter of a million and expected to double, and in 1976 it is *less* than a quarter of a million? We also need to bring on the exceptionally bright child (there are only about 6,000–7,000 of them, or 0·5 per cent of their age group). If we have special schools for specially talented young musicians or ballet dancers, why not for dazzling mathematicians, whose ability can be diagnosed at as early an age as four?

We need a new Education Act to define which institutions in higher education should teach what subjects and offer courses for what qualifications. We should have fewer colleges offering to teach A levels in all subjects, and more who will offer them only in foreign languages. We need more elementary technical and business courses, full-time and part-time. We should ask ourselves whether—especially in 1983 when the number of eighteen-year-olds will begin to decline—we can afford so many university and polytechnic departments with such favourable staff-student ratios. But, then, when it comes to tertiary education the reasons why we should have a new Education Act are legion.

Shortly before this Foreword went to the printers, the Prime Minister spoke on education, and his speech must have put new heart into those who believe that there must be a return to teaching the basic skills at school. But I wonder what he might have said had he had time to ponder on what part universities have to play in these matters. I sometimes wonder whether my colleagues know how often universities are criticised for being unwilling to concern themselves with the schools. We are accused of being too ready to abdicate to the teachers our own responsibilities—for example, in failing to prevent the proliferation of A level subjects; we have been too unready to acknowledge that part of our duty each year is to provide the new cadre of teachers. Do we ever ask ourselves, now that one out of seven school-leavers enter full-time tertiary education, how many of these entrants will on leaving be equipped, not just in terms of ability, but in terms of character, to create wealth and hence reduce unem-

ployment? There is no other way of reducing unemployment. Do we pride ourselves on how many of our graduates entered the nationalised industries, or the new technologies? Ten years ago many academic staff encouraged their best students to follow them in the life of research: they would be most unwise to encourage more than a very few today. The opportunities of mobility and promotion will not be there.

Why are there so few successful firms in high technology? Universities blame industry, industry the universities. But why, suddenly, has the Government had to institute a crash programme into underwater technology of all kinds? University College and Imperial College have been told that they are likely to receive impressive grants to push ahead with such work—and it is a tribute to our Department of Mechanical Engineering that its interest in various aspects of maritime engineering has at last been recognised by a shamefully sluggish Science Research Council. Yet the universities should ask themselves—was it not up to them to foresee what the development of North Sea oil would mean in terms of research? Why is the exploitation of these oilfields in the hands of foreigners instead of our own graduates? And what are the next ventures from which this country could benefit in the 1990s, if only we started tomorrow the fundamental technological research on which their success will depend? Are university departments asking that question and giving an answer in public? In 1966 industry's share of graduate employment was 24 per cent: in 1976 it is under 16 per cent. Are universities concerned about those figures? Are they concerned that the design of our industrial products, expressed in the materials from which they are made and the functions to which they are put, is so often lamentable, that this country now relies more and more on foreign products? Have the universities no responsibility for this?

In the past I have ridiculed the application of crude manpower policies to the universities. But just as Government could not remain indifferent for ever to the numbers of overseas students in higher education, so it rightly cannot be indifferent to the fact that too few highly numerate or highly trained analytical minds, able to express their conclusions in clear, concise English, are emerging from the universities. What are we to do when the declining standards in the schools affect our own entry? In the summer of 1975 Professor Joel Hurstfield asked his colleagues to reflect on that question, and during last year they reflected. I did not—nor did he—find those reflections entirely reassuring. On the whole most departments agreed that the entry was by and large as good as it ever had been.

But that was not the question which Professor Hurstfield posed. He was asking his colleagues to look ahead to the eighties and consider what would happen if—since *prima facie* the case exists—students in their first year were less well prepared. The statement of the UGC quoted above shows that this has already happened elsewhere. University College, with its reputation for genuine scholarship and exacting research standards, deeply respected by so many of the best schools, is still attracting an excellent intake. Yet the time may soon come when we shall consciously have to teach those arts and habits of thought which now, probably, most departments assume intelligent students ought to breathe with the air of a university. We shall have to teach the art of expression, and the habit of attention. We shall have to teach accuracy. We shall have to teach, more than we now do, the arts of disentangling fact from fancy, and of entering quickly into another person's thoughts.

I raise these matters because universities are now entering a period of hardship such as they have never known in the post-war period. As I write, we do not know precisely the terms and conditions of a 4 per cent cut in 1977–78 at constant prices which in September was the best guess that the UGC could make about the future. The cut, in practice, is likely to be considerably higher. Nor do we have any precise idea how much income we will derive from fees. Last year fees formed only 6 per cent of our income: with the rise envisaged, they should in 1977–78 form 25 per cent—whether they will is another matter.

But let there be no mistake about the responsibility for a solution to the overseas student problem, which is going to produce uncertainty and add immensely to the universities' difficulties. It was partly the universities' own doing. I express here an entirely personal view with which my colleagues and the universities as a whole disagree: but the insistence of the universities that there should be no differential between the fees for home and overseas students has now led to a situation where soon many of us will wish that the UGC and the universities had proposed that a quota on overseas students in all institutions of higher education should be imposed, horribly difficult as such a quota would have been to administer. Perhaps the new Secretary of State can be persuaded to change departmental policy: the present state of affairs gives both Government and the universities the worst of both worlds.

During the past two years, in order to remain solvent, University College has made savings on some ninety posts. We have made no redundancies nor have we reduced manual staff numbers. We have

made notable savings in the costs of fuel, printing, the advertisement of posts, and communications. In 1976 terms we are saving £600,000 a year, out of a budget of £14m. Now we are faced with the necessity again to cut; but the operation—to which the Department of Physics and Astronomy and the Department of Chemistry have made a massive contribution—cannot be done in the same way again. This time if we are to fill some vacant academic posts it will have to be by collaboration and interchange between our neighbours among the Schools in the University of London, the Polytechnic of Central London, and some independent research institutions. What is more, in making economies, the College authorities must work in close consultation with all the unions in the College.

For nine years rationalisation and collaboration have been preached by the DES, UGC, politicians and others (my colleagues must be weary of my own sermons). Yet very little has been achieved. At the last Home Universities Conference ever held, Sir Hugh Robson and I spoke of the savings which could be made in *both* sectors of higher education if only there were a scheme to ensure that more students lived at home; and only the other day that veteran, Lord Alexander of Potterhill, returned to Sheffield where at one time he was Chief Education Officer, and found that of the 1,600 students in Colleges of Education, 1,500 came from outside Sheffield and 1,500 students from Sheffield were financed to go to other colleges: in his day, he said, he would have been dismissed for countenancing such extravagance. There were other examples where only central direction will enable savings to be made: but will we get it? Not apparently from the Vice-Chancellors' Committee. And will we get central direction from the Court of the University? In the past long years have been spent in discussing the rationalisation of resources, only to be followed by Schools, or by departments in Schools, deciding gently that perhaps, after all, rationalisation is not feasible. Those days are over. It is refreshing that on all sides academic staff are beginning actively to discuss the unmentionable—reciprocal pacts between departments in different Schools, groupings of Schools, amalgamated Colleges. The central services, the fringe activities, the whole hotch-potch of institutions and bodies which go to make up this unique centre of learning have got to be sorted out. But by whom? It is paradoxical that at the very moment when the nation should be revivifying industry, Parliament will spend months debating devolution; and just when the University should be grappling with the potentially catastrophic situation caused by the spectre of computer commitments and by the unilateral decisions of

the DHSS, over which we have no control, which vastly increase the cost of medical education, we are locked in debate about our constitution. We are going to need direction from the Court as it has never been applied before: all the more reason why good academic advice should be given to it.

We must take this initiative, not only to save ourselves, but because we can hear every day hostile and indignant voices. Lord Eccles, the best Minister of Education since the war, referred recently to what he called a paradox. 'How comes it that the universities turn out more graduates every year, yet every year it is harder to find men and women with the character, the attitude to life, and the skills to fill effectively many posts of responsibility? That is the question the public are asking'. You may call that a silly question. Every member of academic staff could at the drop of a hat give an answer which would absolve the universities—after all, those students who were part of the expansion of the sixties could hardly have got much higher in life than junior executive level. But, however much you chip away at it, it is a question which will not go away. It will still be haunting us by the end of the century. All of us who teach and research know that education can play only a small part in making a better society. But let us not shrug off the fact that it can significantly affect skills and attitudes.

Nothing could give a clearer indication of the sclerosis in our thinking about higher education than a sentence in a UGC document to the House of Commons Expenditure Committee. It said 'Central decision-taking in education is largely about resources'. So, indeed, it is. But that is about the only thought which central decision takers have had in the past ten years. For too long we have been dominated by numbers, and hence the debate dwindles into arguments about cost-effectiveness. The DES, the UGC, and the other policy making bodies in education must ask a simple question. What are these resources for? Hitherto, they have answered: to give equality of opportunity to the young—and that was a good answer and needed implementing.

But there are other answers, and you have only to cross the Channel and see the answer which the French gave. They believe that the purpose of educational institutions is to produce the *cadres*, the trained minds who *at every level* in society will provide leadership. The French run their universities on the cheap, but at the top of their tertiary structure are the *Grandes Ecoles* which train the corps d'elite of their educational army—and it is 40,000 strong. The French train

their future top civil servants rigorously in the famous ENA. We have a miserable apology for a civil service college.

In the past we have paid just tribute to the old Arnoldian ideas of spreading sweetness and light, and our society, despite all the sneers, is the better for it. But in the future we must tailor our institutions to our national needs. In the end there will have to be, more than there is today, greater specialisation in the type of tertiary institution and the level of content of teaching which it provides. Nor can every institution do 'research'—though the teachers in every institution ought to have time to keep abreast of what is written in their subject. That is why at University College, whatever our financial vicissitudes, we must still do battle to preserve our reputation as a centre of excellence which has very special skills to offer to the nation.

November 1976 ANNAN, *Provost*

THE REPORT FOR 1975–76

University College London was founded one hundred and fifty years ago under the title of 'The University of London'. The University College Committee, at their meeting on 10 February 1976, recorded in their minutes that

The College Committee had placed before it the original Deed of Settlement, dated 11 February 1826, by which an association under the name of 'The Proprietors of the University of London' was to found an institution in Gower Street which subsequently became University College London. The College Committee wished to record their continuing faith and trust in the ideals which animated the founders of this University and College and to communicate this resolution to the Senate of the University.

[Carried unanimously, Mr Jeremy Bentham present but not voting].

University College Hospital Medical School

In the summer of 1975 the Council of University College Hospital Medical School resolved to proceed towards integration with the College, in accordance with the recommendations of the Royal Commission on Medical Education, 1968. The Royal Free Hospital School of Medicine, which the Todd Report recommended should also be linked with the College, are not yet in a position to come to a decision about their future. The Standing Committee of the Joint Committee representing all three Institutions agreed that the academic and administrative implications of reuniting UCHMS with the College should be explored and consideration given to a possible organisational structure. During this session several working parties, with members drawn from UCHMS and the College, have examined areas ranging from the constitution to student residence. The results of this detailed study will form a report by the Joint Committee to the College and Medical School next session. It is intended to achieve the reunification of the College and the Medical School in the session 1977–78, one hundred and fifty years after the inauguration of medical teaching in Gower Street.

Finances

The Annual Report for 1974–75 outlined the steps taken by the College to meet the shortfall in recurrent resources. 1975–76 was the second year of the three-year programme, at the end of which it was intended that a 5 per cent reduction in College expenditure would be achieved, largely by decreases in the staff establishment. During

this year the efforts of Heads of Departments, co-ordinated by the Deans, have enabled College commitments to be reduced to a level which will ensure that the target for 31 July 1977 can be met without undue constraint in the final year. Economy measures may seem largely negative in their effect but they do provide a useful opportunity for reappraisal of the use of resources. Full use has been made of this opportunity and Departments have not found the operation entirely damaging.

The College is determined that the evolutionary process shall not be nullified by the need to make savings, although it is appreciated that developments in future can almost certainly only be financed by sacrificing existing activities. To this end, and as an essential step towards the development of a positive policy not merely of retrenchment but of reallocation of resources, where justified, the College Committee in July 1975 resolved to set aside a sum of £200,000 accumulated from past income to support new posts in anticipation of known retirements occurring in the next quinquennium. This is essentially a 'pump-priming' operation. The cost of establishing a necessarily limited number of new posts in 1975–76 and 1976–77 would progressively be financed by savings from the abolition or down-grading of specified posts as they became vacant through retirement in the years 1977–82.

At the invitation of the College Committee, the Professorial Board formulated criteria to be applied in the assessment of requests from Departments for new posts. These fell into three broad categories. There were quantitative criteria—staff:student load ratios, cost per student load unit, and recent growth in undergraduate numbers; policy criteria—for example, priorities stated in the Development Submission for the Quinquennium 1977–82 or decisions to introduce new courses whose costs, etc., could not be measured with certainty; and qualitative criteria. The Professorial Board agreed that a proposal for a new post, to be financed initially from the £200,000 fund and subsequently from a nominated retirement of equivalent value, ought to receive the unanimous approval of the Deans before application was made for financial allocation.

Among new posts to be established by means of the fund in the session 1976–77 are Lectureships in the Departments of History of Art, Psychology, Chemical Engineering, and Electronic and Electrical Engineering, and a Technician appointment in the Department of Geology. Unfortunately, with further restraints upon us, we cannot continue the scheme into 1977–78.

The maintenance of a flexible and progressive policy in the con-

strained circumstances in which the universities are almost certain to find themselves during the next few years will tax even the ingenuity of University College—but we shall try hard.

Two areas of College activity have undoubtedly suffered more than any others from the effects of inflation and devaluation of the pound sterling. In the first place, the Library was particularly hard hit by the rise in the cost of books, and especially periodicals, many of which are bought in foreign currency. Some retrenchment in periodical purchases is inevitable and the Library Committee has agreed to give this most urgent consideration. In the meantime, the College Committee has made available an additional grant of £50,000 to be used over the transitional period while this review is taking place. An effective pooling and sharing arrangement within the University is more urgently needed than ever.

After the Library, by far the greatest cause for concern over College commitments relates to the maintenance of buildings. Maintenance costs have over the last four years risen more than those in any other area. Moreover, the College is now facing the gradual replacement of electrical, gas, plumbing, and other services installed in our buildings during the immediate post-war period. Such work can only be financed from the Long-Term Maintenance Fund, and our problem is to make adequate annual contributions to this Fund when costs are escalating so unpredictably. We now estimate that the capital replacement value of the assets involved has quadrupled to £16m. since 1970, while our annual contribution to the Fund has had to be increased to 3½-times the figure included in the Quinquennial Estimates 1972–77 (£105,000). The College must now make provision at the rate of £350,000 per annum on *current* prices and, in future, there must be an annual, and not just a quinquennial, revaluation of assets and commitments. If we are to preserve our buildings in a fit state for posterity we must look after them properly. During the next quinquennium this will, in some years, involve annual expenditure as high as £1m.

In last year's Report reference was made to the problems of operating Student Accommodation and Refectory services on a break-even basis with the limited degree of subsidisation allowed by the UGC. By the endeavours of all those who contribute to a very successful vacation letting enterprise, charges in College Halls of Residence and Student Houses were maintained at levels lower than those found in most other universities. However, the problems which will face us in the future in the replacement of accommodation currently leased and the development of sites give cause for concern,

in spite of the recent announcement of a further grant of £450,000 from the Anonymous Donor (see p. 18). Because we have kept our charges to students so low, there has been little or no opportunity to replenish the reserves of the Student Accommodation Account to provide a capital fund from which future acquisitions might be made. During the session, therefore, the College Committee laid down that each Hall and the Student Rooms should aim in future to set aside from the profits on vacation lettings a certain percentage to General Reserve for this express purpose. Our ability to do this will depend, of course, on how successfully inflation can be controlled and on how well the tourist trade holds up. Our students living 'in' have had it very good, compared with other students here and elsewhere: they cannot expect this to continue indefinitely.

Turning to the College Refectories, inflationary pressures and consequent changes in eating habits have aggravated an already difficult situation. In an attempt to reduce operating costs by limiting the number of outlets and the diversity of services, the Refectory ceased to offer separate staff facilities in October 1975, with understandable unhappiness among staff. Overall, with costs rising so fast, the trading figures continue to deteriorate. During the session it was agreed that the Refectory trading year—1 April to 31 March—should be brought into line with the College financial year—1 August to 31 July. The result of this decision is that the Accounts for 1975–76 include a sixteen-month period for the Refectory and disclose a loss of £50,200.

The College ended the year with a small surplus of £118,056 in relation to an income of the College for 1975–76 of £16,864,350, an increase of £3,526,375 over the income for 1974–75. Expenditure in 1975–76 was £16,746,294, inclusive of the cost of research borne by outside grants, which total £2,955,854 compared with £2,193,199 in 1974–75. The number of these grants was 520. Capital grants announced for the year amounted to £102,268 compared with £453,954 for the previous year. Receipts against these and previous capital grants and capital expenditure amounted to £361,910 compared with £261,953 in 1974–75.

Building Programme

As far as university building in general is concerned, 1975–76 was probably the bleakest year for new buildings since the war. The College, however, was fortunate that during this period it managed to maintain momentum by completing two useful conversion projects and starting its major decanting building.

The conversion of two houses at 3–4 Taviton Street was completed and the Department of Political Economy was brought together in December when it moved into these premises. The conversion of the Bartlett Building was completed in June 1976 and the building was furnished and fitted out for various units to move in during the Long Vacation. The building now houses the Audio-Visual Unit, complete with small television studio, the Department of History of Art, and a small computer suite for the Department of Statistics and Computer Science, and will provide extra space for the Slade School and the Department of Psychology. The Dean of Students, the Student Counsellor and the Careers Adviser have also been rehoused in the building.

The biggest project by far is the decanting building at Bedford Way, which started on site in March 1976. This building, which is expected to cost about £2·8m., will complete the Bedford Way frontage of the group of buildings designed for the Institute of Education and the Institute of Advanced Legal Studies. When completed in 1978, it will house the College's Departments of Psychology and Geography, which will be decanted there to free accommodation in the Rectangle for the future redevelopment programme.

In hopes of this programme going ahead, the College, during the year, commissioned a feasibility study by the Architects for the site occupied by temporary huts between the South Junction, the Central Collegiate Building and Gordon Street. The scheme envisages a development of the whole site, principally for a new central College Library, but also having Union facilities grafted on to the Central Collegiate Building and so arranged as to create a new quadrangle at Cloister level by the construction of a raised deck over part of the proposed Union space.

Once more it is our very great pleasure to record with gratitude the offer of a very substantial benefaction from the Anonymous Donor for the construction of another stage in the development of the student residence complex on the Whitcher Place site at Camden Town. It is expected that between ninety and a hundred places can be provided and it is hoped that work on the site can start during 1977.

Staffing Matters

Much attention has been devoted this year to an assessment of the impact on the College of government legislation on employment protection and health and safety, and discussions have begun on the question of trade union representation on committees of the College.

NUPE and the EETPU have been recognised for the purposes of representing staff in the Maintenance Department.

There has been considerable activity on the question of staff training. The Sub-Committee on the Training of Teachers carried out a survey on the workload of probationary lecturers and prepared a code of practice for the guidance of Heads of Departments. Agreement was also reached on a new procedure for reporting on probationary lecturers. The Technical Staffs Training Advisory Sub-Committee began a major exercise concerned with the employment and training of trainee technicians; and a seminar on finance and accounts was held for senior administrative staff.

Constitutional Matters

The report on the review of the committee structure in the College, referred to in last year's Report, was approved by the College Committee at the beginning of the session, and the new constitutions and terms of reference of committees will become effective from 1 October 1976.

Regulations for Management, in pursuance of the new draft Statutes, have been drawn up by a Working Party of the Committee on College Governance, under the chairmanship of Professor J. A. C. Thomas, and approved by the Professorial Board and the College Committee during the session. They will come into force when the College receives its Charter of Incorporation, subject to their ratification by the new governing body of the College.

A new constitution for the Students' Union was introduced by the College Committee in February at the request of the Union. Under the revised constitution the number of sabbatical posts is increased from two to three, the three officers being designated as follows, to give a clear indication of their respective areas of responsibility: an Education and Welfare Officer (President), a Services and Social Officer (Deputy President), and an Administration and Finance Officer (General Secretary). The new arrangements are designed to give a more even distribution of responsibility than has been the case in the past, although ultimate responsibility for Union affairs remains with the President, who continues to represent the Union on the main standing committees of the College.

Student Numbers

Students registered at the College during the session numbered 5,764, an increase of 111 over the previous session. The number of full-time students increased from 4,850 to 5,003, 3,608 of whom were

undergraduates. 1,303 of these undergraduates were admitted for the first time to first degree courses, and 694 of the 1,395 full-time postgraduates were admitted to taught courses.

Over 45 per cent of the full-time undergraduates in attendance at the College this session lived in student houses or in halls of residence provided by the College or the University, while 23 per cent lived at home; the remainder were in lodgings or flats.

Academic Matters

At a meeting of the Professorial Board towards the end of last session, Professor Joel Hurstfield drew attention to the effects of the changing character of secondary education upon the qualifications of candidates for admission to the College. He prepared a paper indicating the lines on which inquiry might take place, and this has been widely discussed within the College during the past year. The Board have now decided to appoint a standing committee to consider the academic policy of the College in the light of the changes taking place in the curricula and examination patterns of schools.

Five new undergraduate courses were introduced at the beginning of the session, two in the Faculty of Arts, the B.A. Degree in Fine Art and the B.A. in the History of Art, two in the Faculty of Science, the B.Sc. in the field of Computer Science and the B.Sc. in the field of Human Sciences, and one in the Faculty of Engineering, the B.Sc.(Eng.) in Electronic Engineering with Computer Science. At postgraduate level the only new course instituted was for the M.Sc. Degree in the History and Philosophy of Science. At the end of the session the College ceased teaching for the following postgraduate courses: the M.Sc. in Planning Studies-Social Sciences in Environmental Planning, the M.Sc. in International Law, the M.Phil. in the Psychology of Handicapped Children, and the College Diploma in Space Science.

Mention is made on page 30 of Professor Koenigsberger's retirement and of the Development Planning Unit which he brought to the School of Environmental Studies when he joined the College in 1971. During 1975 negotiations between the College and the Ministry of Overseas Development were successfully concluded, as a result of which the Ministry agreed to provide a grant of up to £413,350 in support of teaching in the Development Planning Unit over the period 1975–80. This grant has made possible significant expansion in the activities and staffing of the Unit, and it is the intention of the College, through the School of Environmental Studies, to encourage the continued development of the Unit as a centre of international

repute in the field of development planning in the developing countries.

As in previous years, the Computer Centre has provided facilities for the College and other Schools of the University. The terminal system has been expanded and several departments are now equipped with their own keyboard terminals with high speed private lines. The work of linking the IBM 360/65 to the rest of the London network has proceeded satisfactorily and was in trial operation before the end of the session. In May the Computer Board for Universities and Research Councils told the University that it was unable to agree to the replacement of our present machine by another IBM system. Consideration of the future computing equipment available to the College is one of the first tasks facing the newly-established Computer Policy Committee. An item of inter-departmental co-operation worthy of note is the video-taped programming course, produced by the Centre and the University Audio-Visual Centre. This course is now in use in many establishments, educational and commercial, in the UK as well as abroad.

The Mullard Space Science Laboratory of the Department of Physics and Astronomy celebrated the tenth anniversary of its opening at Holmbury House, Holmbury St Mary, with an exhibition in the College Cloisters at the beginning of March. In those ten years the Laboratory's activities have expanded into two main research areas, magnetospheric physics—the study of the ionised plasma surrounding the Earth—and X-ray astronomy, and the exhibition gave a striking impression of the scope and complexity of research which in the one case is partly, in the other case wholly, a creation of the space age.

The scheme for the award of Sessional Prizes to first-degree students, which was instituted in the College in the session 1964–65, was reviewed during the session by a sub-committee consisting of the Faculty Tutors, with the Senior Tutor as chairman. Amendments were made to the scheme to take account of the many new degree courses introduced in the intervening years and of the changes over the period in the numbers of students taking the individual courses. The sub-committee reviewed also some aspects of other awards to students, as a result of which the value of the smaller prizes was raised to a minimum of £10.

A list of publications of members of the College departments will be found on pp. 41–112. This is an impressive record and though no attempt is made here to summarise the research projects on which the departments have been engaged during the session, many of them

have attracted substantial grants from Research Councils and other grant-giving bodies, which are gratefully acknowledged in Appendix XII.

The Schools Conference held at the end of March was attended by a hundred or so Heads and deputies from Schools and Colleges all over England and Wales. The guests were accommodated in Ramsay Hall, where two informal evening sessions were held, including a screening of the College Film. Within the College itself there was a full programme of talks and discussions, as well as the customary visits by small groups to individual academic departments. Apart from the sessions devoted to purely academic matters, the programme also included talks on student relations, residential accommodation, welfare services, and career opportunities. Once again the friendly atmosphere which has been such a feature of these conferences over the years was an important factor in ensuring its success. At the final session an interesting and lively discussion on the new Schools examination proposals concluded what was generally felt to have been a most useful and pleasurable occasion.

The Eightieth Foundation Oration was delivered by Sir Huw Wheldon in the Collegiate Theatre on 8 March 1976. The subject of his oration was 'The Perspectives in Television'.

The College Collections

On one front—conservation and restoration—work has proceeded steadily, in continuation of the programme inaugurated by Professor White and Mrs Lightbown in 1972. The Finance Committee again supported this work, with a grant of £5,500, mostly for restoration, mounting and boxing of items from the print collection, for the current year, making a total of £31,000 thus committed since 1972. Against a figure of £1m, which is a not unreasonable estimate of the value of the collections, this is minimal. We now enjoy a display of great interest in the Cloisters, of works by old masters and recent artists, in secure frames (thanks to the help of the Friends).

Unfortunately, security of works displayed other than in these frames is more precarious. Our two portraits of Jeremy Bentham disappeared during the year, and only one of these was recovered. Hence—a sad commentary on the times we live in—we have had to adopt a more cautious attitude to the display of works of known value, and to install burglar-alarms for the larger works displayed in certain public areas.

During the year we received the report of the Standing Commission on Museums and Galleries on their visit to the College in the previous

year. They understood our problems, and their report, which advocates more public help for display, conservation and protection of artistic treasures such as ours, may be helpful to us—at any rate when times improve.

However, our main preoccupation is the accommodation of our various collections. We have been aware for many years of the unsatisfactory housing of the Egyptological Collection; and we were encouraged when the UGC indicated that they were still supporting the Todd UCRF medical scheme, one side-effect of which would be the demolition of the building which now houses Egyptology, in Dickensian conditions, and its replacement elsewhere by something more suitable. The main collection of prints and drawings is now housed, better than it used to be, in premises which are inconveniently detached from the main College buildings. A more suitable home for it ought to be found.

All the staff concerned have shown the utmost patience and devotion in adverse circumstances, affecting both the art collections and Egyptology alike. The promised land is perhaps becoming something more substantial than a mirage in the desert; though we would like to see some bricks and mortar, and not just paper plans.

Association of Friends of University College London

During 1975–76 the Friends of University College authorised grants totalling £3,581 in support of the following projects: an edited and completed print of the filmed tribute to Professor Sir William Coldstream on his retirement from the Slade Chair of Fine Art (£400); purchase of books and periodicals for the Library of the British Student Health Association, which is housed in the College (£300); three prizes of £25 for a competition by the Photographic Society in each of the three terms of 1975–76 (£75); provision of chairs, coffee tables, coffee machine and notice-board for the Postgraduate Common Room (£1,356); newsreels of College archive material made by the Film Society (£150); underwriting of thrust-stage required for safety purposes for the Music Society's production of the opera *Macbeth* (£250); the improvement of the Theatre Workshop for the Dramatic Society, including the provision of a dressing-room by conversion (£150); repair of damage to piano in the Haldane Room used for Chamber Music Club concerts, and provision of protective cover for the piano (£50); production of a leaflet guide to the Flaxman plasters in the Flaxman Gallery (£350); grant towards the purchase of a second coaching launch for the University College and Hospital Boat Club (£500).

The Friends continue to be asked for help in providing much to improve and enhance the quality of life in the College in the face of constantly increasing costs. If they are to maintain their support, then both membership numbers and the level of subscriptions and donations must be increased.

SUPPLEMENT

HONOURS AND DISTINCTIONS

In the New Year Honours in 1976 F. E. P. Sandilands, Treasurer of the College, was created a Knight Bachelor, and Dr Joan Evans, Fellow of the College, was created a D.B.E. for charitable services. The C.B. was conferred on F. H. East, Director of the Royal Armament Research and Development Establishment of the Ministry of Defence and a former student in the Faculty of Science, the C.M.G. on L. Mullins, Director of Research of the Malaysian Rubber Producers' Research Association, also a former student in the Faculty of Science, and the C.V.O. on Major-General C. E. Pert, a former student in the Faculty of Arts. The C.B.E. was conferred on Professor C. E. Dent, Professor of Human Metabolism at University College Hospital Medical School and Fellow of the College [Died 19 September 1976], on Professor Randolph Quirk, Quain Professor of English Language and Literature and Fellow of the College, and on two former students: B. M. Feilden, architect, and S. A. Ghalib, lately Managing Director of the Nuclear Power Company.

In the Queen's Birthday Honours the following Fellows of the College were created Knights Bachelor: W. S. A. Atkins, Chairman of the W. S. Atkins Group, for services to export, and Dr R. E. O. Williams, Director of the Public Health Laboratory Service. Professor Elizabeth M. Hill, Emeritus Professor of Slavonic Studies in the University of Cambridge, Fellow of the College, was created a D.B.E. for services to Slavonic Studies, and the C.B.E. was conferred on the following former students: H. G. Ellis, Controller (Overseas Division B) at the British Council, H. G. Lillicrap, Chairman of Cable and Wireless Ltd, and R. B. K. Stevenson, Keeper of the National Museum of Antiquities of Scotland.

A number of interesting and important appointments were announced during the session. Appointments of members of the College included those of Professor Lawrence Gowing as a Trustee of the British Museum, Professor R. A. Humphreys as Chairman of the Committee of Management of the Institute of Archaeology and a member of the Advisory Committee to the British Library, Professor Sir Andrew Huxley as President for 1976–77 of the British Association for the Advancement of Science and a member of the Scientific Authority for Animals, and Professor D. M. Wilson as Director of the British Museum, a member of the Ancient Monuments Board for England and a governor of the Museum of London. Appointments of former students included those of F. J. Arnold as Registrar of

Bow County Court, Dr Dorothy L. Nieuma as Minister of Education in the Cameroon Republic, Professor P. D. Strevens as Director-designate of the Bell Educational Trust, Cambridge, and H. K. Woolf as a Master of the Bench of the Inner Temple.

Professor Sir Bernard Katz and Emeritus Professor Sir Harrie Massey were re-appointed Vice-Presidents of the Royal Society, and Professor J. W. Black, Professor W. G. Chaloner, Professor Patricia H. Clarke, Professor E. G. Gray and Sir Frederick Warner were all elected to Fellowships of the Society. Former students similarly honoured were Dr L. G. Goodwin, Professor J. M. Ritchie and Professor H. H. Rosenbrock. Emeritus Professor Lord Evans, Fellow of the College, was appointed Chairman of the Royal Society of Literature, D. J. Foskett was elected President of the Library Association, Professor R. G. Hopkinson was appointed an Honorary Member of the Illuminating Engineering Society, Professor P. A. Samet was elected Deputy President of the British Computer Society, Emeritus Professor Stephen Spender as President of the English Centre of PEN International, and Dr D. J. B. White as Vice-President of the Institute of Wood Science. Of former members of the College, Sir Hugh Casson was elected President of the Royal Academy, Professor J. T. Coppock a Fellow of the Royal Society of Edinburgh, and Professor H. C. Darby was awarded honorary membership of the Royal Geographical Society.

Dr F. H. C. Crick was elected an Honorary Fellow of Gonville and Caius College, Cambridge, Emeritus Professor W. N. Medlicott an Honorary Fellow of the London School of Economics, and Emeritus Professor J. Z. Young an Honorary Fellow of Magdalen College, Oxford. Professor G. J. Kane was elected a Fellow of King's College London, as were Professor P. Collinson, a former student and member of staff of the Department of History, and Professor F. R. Crane, a former student in the Faculty of Laws.

The following were honoured by election to foreign academies and societies: Dr V. Karageorghis was elected a Foreign Member of the Royal Swedish Academy of Letters, History and Antiquities and a Corresponding Member of the French Académie des Inscriptions et Belles Lettres, Professor W. R. Mead a member of the Norwegian Academy of Science, Professor Randolph Quirk a foreign Fellow of the Royal Belgian Academy of Sciences, Professor E. G. Turner an Ordinary Member of the German Archaeological Institute, Professor Elizabeth M. Wilkinson a Corresponding Fellow of the Deutsche Akademie für Sprache und Dichtung, and Professor D. M. Wilson a Foreign Honorary Member of the Polish Archaeological

and Numismatic Society and a full member of the Royal Gustav Adolf's Academy of Uppsala, Sweden.

Honorary degrees were conferred on members of the College as follows: the D.Univ. of the University of Essex on W. J. Bray, the D.Sc. of the University of Exeter on Dr E. J. Denton, the Litt.D. of the City University and the LL.D of the University of Liverpool and of the University of Bath on Lord Goodman, the LL.D. of the University of London on Sir Douglas Logan, the D.Sc. of the Heriot-Watt University on E. G. M'Ewen, the D.Lit. of the University of London on Emeritus Professor A. D. Momigliano, the fil.dok. of the University of Lund on Professor Randolph Quirk, the D.Sc. of the University of Bath on Dr L. Rotherham, an honorary doctorate of the Observatory of Paris on Professor M. J. Seaton, the Docteur ès Lettres *honoris causa* of the University of Geneva on Professor E. G. Turner, and the D.Univ. of the University of Surrey on Sir Ronald Wates. Honorary degrees conferred on former members of the College included: the D.Sc. of the University of Hull on Professor M. S. Bartlett, the LL.D. of McGill University on Dr M. G. Smith, the D.Sc. of the Queen's University of Belfast on Professor D. H. Smyth, the D.Litt. of the University of Aberdeen on Professor G. Donaldson, the D.Tech. of the University of Bradford on Professor W. Johnson, and the D.Sc. of the Cranfield Institute of Technology on Professor T. Kempner.

Dr D. K. Aitken was awarded the Royal Society Radcliffe Trust Research Award, Dr J. R. Ellis a Royal Horticultural Society Award of Merit, and Dr S. M. Zeki the Royal Society Henry Head Research Fellowship. The Bronze Medal of the Royal Institution of Naval Architects was awarded jointly to Professor R. E. D. Bishop, Dr R. K. Burcher and Dr W. G. Price, and Professor P. G. Foote and Professor D. M. Wilson were jointly awarded a prize by the Royal Gustav Adolf's Academy of Uppsala, Sweden, for the contribution made by their book *The Viking Achievement* to the study of early medieval culture in Scandinavia. Two former students in the Faculty of Science received awards: Dr W. D. Hamilton a Zoological Society of London Scientific Medal for his contribution to zoology in 1975, and Professor J. W. Fairbairn the Harrison Medal of the Pharmaceutical Society of Great Britain for his contribution to the science of pharmacy.

APPOINTMENTS

Sir Colin Crowe and Mr E. V. Symons were appointed members of the College Committee during the session. Mr Symons was also

appointed to membership of the Finance Committee, as were Mr R. L. Hopps and Mr H. M. Priestley; while Mr Priestley joined the Investments Committee.

At the beginning of the session Professor Lawrence Gowing, formerly Professor of Fine Art in the University of Leeds, came to the Slade Chair of Fine Art and the Headship of the Slade School, Dr J. L. Jowell, formerly a Lecturer at the London School of Economics, was appointed to the newly-established Chair of Public Law, and A. D. G. Smart, formerly County Planning Officer for Hampshire County Council, came to the Chair of Urban Planning and the Headship of the School of Environmental Studies. Professor F. F. Heymann, Professor of Physics at the College by conferment of title, took up the Quain Chair of Physics and the Headship of the Department of Physics and Astronomy, and Professor I. R. Christie succeeded Professor J. H. Burns as Head of the Department of History. The University of London conferred the title of Professor of Physics on Dr. R. E. Jennings and of Professor of Mathematics on Dr D. G. Larman.

Dr Gerta Vrbová, formerly Reader in Physiology in the University of Birmingham, was appointed to a Readership in Anatomy from 1 September 1976. The following became Readers by conferment of title: M. P. Barnes (Scandinavian Philology), Dr T. Barta (Structural Engineering), Dr A. Boksenberg (Physics), and Dr P. H. W. Butterworth (Biochemistry).

The following Visiting Professors were appointed during the session: Professor Edvard Beyer, University of Oslo (Scandinavian Studies); Professor J. L. Cleasby, Iowa State University (Civil and Municipal Engineering); Professor Raymond Goldsmith, formerly of Yale University (Political Economy); J. Gowan, Banister Fletcher Lecturer (Environmental Studies); Professor Roy Schafer, Yale University (Freud Memorial Visiting Professor of Psychoanalysis); Dr R. Ulrich, Max-Planck Institute (Electronic and Electrical Engineering); and Professor Gregory Vlastos, Princeton University (Greek and Philosophy).

In the Department of Physics and Astronomy Professor R. L. F. Boyd became Director and Dr J. L. Culhane Deputy Director of the Mullard Space Science Laboratory and Professor R. Wilson was appointed Director of the University of London Observatory. Other College appointments included: Mrs Wyn Bramley as Student Counsellor from 1 January 1976, in succession to Miss Patricia Milner; A. R. Brudne as Catering Officer, from 1 April 1976, following the retirement of Mrs Joanna Morgan; Dr Anna C.

Haylett as Physician at the Health Centre in place of Dr E. Mirian Jones. Within the College Dr A. J. Layton succeeded H. G. Effemey as College Safety Officer, and D. J. Galligan replaced A. J. Oakley as Warden of Max Rayne House. L. J. Gue, Senior Assistant Secretary (Academic Administration) was appointed Deputy Secretary with effect from 1 January 1976.

There was a number of changes in College Faculty appointments: Professor R. W. Rideout and Professor J. W. Mullin became respectively Deans of the Faculties of Laws and Engineering; Professor J. E. C. T. White, Professor E. C. Ryder, Professor K. O. Kemp and Professor P. D. Cowan became respectively Vice-Deans of the Faculties of Arts, Laws, Engineering, and Environmental Studies; D. J. Stephens and Dr N. R. Saunders were appointed respectively Sub-Deans of the Faculties of Laws and Medical Sciences. In the University of London Professor P. N. Rowe became Vice-Dean of the Faculty of Engineering.

During the year announcement was made of the following appointments of members of the College to academic posts outside the College: Professor E. C. Amoroso to a Royal Society Inter-University Visiting Professorship in Animal Physiology in the University of Nairobi, Professor P. R. Banham as Professor of History and Theory of Architecture in the State University of New York at Buffalo, B. A. R. Carter as Professor of Perspective at the Royal Academy of Arts, Dr F. J. J. Cadwallader as Professor of Maritime Law at the University of Wales Institute of Science and Technology, Dr R. R. Davies to the Chair of History at the University College of Wales, Aberystwyth, Professor H. Harris to the Harnwell Chair of Human Genetics in the University of Pennsylvania, N. A. O. Lyttelton as Professor of History in the University of Reading, H. M. Nixon as the James P. R. Lyell Reader in Bibliography (for 1978–79) in the University of Oxford, and C. Wyld as Director of the Computer Centre, University of Tasmania. The University of London conferred the title of Professor of Neonatal Paediatrics on Dr E. O. R. Reynolds in respect of his post at University College Hospital Medical School.

Appointments of the following former members of the academic staff and former students to academic posts outside the College were also announced: Dr A. J. Cole to the Chair of Computational Science in the University of St Andrews, Dr J. P. Garlick as Head of the Department of Physical Anthropology, University of Cambridge, H. Goldstein to the Chair of Statistical Methods at the Institute of Education, London, J. A. Jolowicz as Professor of Comparative Law,

University of Cambridge, P. J. Parish to the Bonar Chair of Modern History in the University of Dundee, Professor R. H. Parker to the Chair of Accountancy in the University of Exeter, Professor R. W. Revans as External Professor in the Department of Management Studies, University of Leeds, Dr M. Roberts as Chairman of the Department of Geography, Simon Fraser University, British Columbia, and Dr R. Williamson to the Chair of Biochemistry at St Mary's Hospital Medical School.

The title of Professor was conferred by the University of Hull on Dr T. W. Bamford, Director of the University's Institute of Education, by the University of Birmingham on Dr D. J. Lodge (Modern English Literature), and by the University College of Wales, Aberystwyth, on Dr P. D. G. Thomas (History). Dr S. Cornbleet was appointed Reader in Physics in the University of Surrey and the title of Reader was conferred by the University of London on Dr P. F. Benson (Clinical Biochemical Genetics) and Dr F. B. Giannelli (Cell Biology and Cytogenetics) both of Guy's Hospital Medical School, and by the University of Durham on Dr A. D. Martin (Physics) and Dr I. G. Simmons (Geography).

RETIREMENTS

Professor Otto Koenigsberger's association with University College has been highly significant in initiating a new and growing field of studies within the School of Environmental Studies. He was appointed Professor of Development Planning in the School in 1971 and brought with him from the Architectural Association a small team of architect planners to form a nucleus of the Development Planning Unit specialising in the identification of new approaches to the problems and potentials of urbanisation in the developing countries. In this Unit, which is very much the final product of Professor Koenigsberger's long and influential career as one of the key international figures in the field of urban development planning, the foundations have been laid for a unique international centre in teaching, research, and advisory services in this field. He obtained his Doctorate at the Technical University of Berlin in 1935, was awarded first prize in the Schinkel Competition and was promptly expelled by the Nazis. After an archaeological sojourn in Cairo, he worked in India, first as Chief Architect and Planner of Mysore State and later as Director of Housing to the Federal Government of India. He came to Britain in 1951 to become Head of the Department of Development and Tropical Studies at the Architectural Association of which he later became Principal. There he exerted a world-

wide influence on the development of ideas, attitudes and techniques in urban planning in the developing countries. Apart from a period as Professor of Planning at Columbia University, New York, he has undertaken numerous missions for the United Nations, and has provided advice and help to governments overseas. His publications range from textbooks on climatic design to seminal contributions to the theory and practice of development planning. He will be continuing his association with the College both as an Honorary Research Fellow in the School and as a member of the Advisory Committee for the Development Planning Unit.

Professor Elizabeth M. Wilkinson, herself a graduate of Bedford College, joined the staff of the Department of German at University College in 1940; she became Reader in 1947, Professor by conferment of title in 1960, and was appointed to the established Chair in the following year. She was Head of the Department from 1961 to 1968. Professor Wilkinson is one of this country's most distinguished scholars in German studies, recognition of which has been expressed both here and abroad through the various honours bestowed on her: she was awarded the Gold Medal of the Goethe Institut in 1965, elected a Fellow of the British Academy in 1972, and a Corresponding Member of the Akademie der Wissenschaften zu Göttingen in 1973, awarded the foreign scholar prize by the Deutsche Akademie für Sprache und Dichtung in 1975, and elected Corresponding Fellow by them in 1976. She has also held various visiting professorships, including that of Professor-at-Large at Cornell University. Her main interests, reflected in a long list of publications, lie in the Age of Goethe, the history of ideas, the application of aesthetics to literature, and the methodology of literary criticism. Much of her work has been in collaboration with Professor L. A. Willoughby (the Senior Fellow of the College); *Goethe, Poet and Thinker* (1962) and a translation of Schiller's *On the Aesthetic Education of Man* together with an extensive introduction and commentary (1968), were among the major achievements of their collaboration. But Professor Wilkinson is not only a scholar, she is also a very able administrator, and this combination of scholarship and administrative acumen brought the Department many benefits, not least the planning and realisation of the College-based syllabus and degree course. She always had the welfare of the students at heart and, forthright in praise and criticism (proud of her Yorkshire roots!), was a very lively and stimulating lecturer and teacher. She served the English Goethe Society for many years as Honorary Secretary and Editor of their annual Publications and has been President since 1974.

B. A. R. Carter joined the staff of the Slade School in 1949. He was an outstanding teacher of drawing and painting, and also made a special study of the technique and history of Perspective, becoming a leading authority in this field. In the early 1950s he collaborated with Professor Wittkower in a research project on a painting by Piero della Francesca, the results of which were published in the *Journal of the Warburg and Courtauld Institutes* in 1953. The proximity of the Graves Collection of early scientific works in the College Library became a strong incentive to further study of the origins of linear perspective in the optics of antiquity and the Middle Ages. The results of his scholarly pursuits were eventually incorporated in a very substantial article on Perspective that he contributed to the *Oxford Companion to Art* in 1970. He was appointed Professor of Perspective at the Royal Academy of Arts in 1975. His work as a painter is represented in the collections of the Tate Gallery, the London Museum, and the Arts Council, and in many private collections.

Dr P. B. Downing retired from his Senior Lectureship at the end of the session, after twenty years on the staff of the Department of Philosophy. After a brief career as a solicitor and some years of war service, Downing in 1951 enrolled as an undergraduate in the Department. As a postgraduate he worked on philosophical logic under the supervision of Professor A. J. Ayer, and his research topic—the analysis of counterfactuals—became the core of his more advanced teaching as well as the subject for a number of interesting and ingenious papers read to colleagues (and learned societies) over the years. In 1971 he was badly injured in a car accident and later found himself unable to do justice both to teaching and research. He therefore unselfishly decided to retire from his College post.

H. G. Effemey, who had been College Safety Officer and Senior Lecturer (part-time) in the Department of Electronic and Electrical Engineering, retired on health grounds at the end of the session. He joined the staff of the Department in 1947, became a Senior Lecturer in 1967, and will be continuing his association as an Honorary Research Fellow. In 1958 his work in research was recognised by the I.E.E. in the award to him, jointly with Professor H. E. M. Barlow, of an Ambrose Fleming Premium. He played an important part in departmental administration, and for some years, while the new Engineering building was under construction, he also acted as co-ordinator of the requirements of all the Engineering departments which were to be housed there. His appointment in 1969 as the first College Safety Officer was an outstanding success. He tackled a

difficult job with skill and devotion and with an understanding which gained for him the respect and co-operation of his colleagues throughout the College.

Dr D. H. Lodwick Evans retired on health grounds from the Department of Anatomy and Embryology. He entered College as a pre-clinical student in 1939 and completed his clinical training at University College Hospital. He joined the staff in 1945 and greatly helped in the post-war resettlement of the Department on its return to Gower Street. In spite of a heavy teaching load, Dr Evans quickly began research on problems associated with the maturation of the autonomic nervous system, and was soon the centre of a group of enthusiasts, recognised as their leader and inspirer. He spent 1953–54 in the University of Pennsylvania as a Rockefeller Travelling Scholar and he became a Reader in 1955. During his thirty years in the Department he has had many collaborators; that he chose his assistants well is evident from the number that have become established in senior University and Health Service posts. For many years Dr Evans has been ably assisted in his research by his wife, Dr Eileen Evans. Both will be sadly missed by colleagues and students.

Dr Hilda M. Hulme, a student of the College from 1932 to 1937, returned to the Department of English in 1944 as a temporary Assistant Lecturer and became a Reader in 1972. Most of her research has been on the language of Shakespeare, especially his vocabulary. The title of her most influential book, *Explorations in Shakespeare's Language: Some Problems of Word Meaning in the Dramatic Text* (1962), indicates the nature of her work in general, namely the application of linguistic skills to the elucidation of literature and drama. Dr Hulme's methods of exploration have varied: at one extreme was the scrutiny of English parish records; at the other, work as a Research Fellow at the Folger Shakespeare Library, Washington, during the tenure of a Leverhulme Fellowship. Besides her Shakespearian studies she has investigated stylistic aspects of several post-Renaissance authors and has recorded her findings in many articles in learned journals.

With the retirement of H. M. Nixon and E. K. Timings, the School of Library, Archive and Information Studies loses two important members of its part-time teaching staff. Their teaching, based as it has been on a lifetime's experience, has been invaluable, they have published extensively, and they have both given generously of their time to the School. Mr Nixon has taught Historical Bibliography to Librarianship students since 1959 and has also undertaken the supervision of higher degree students. He was latterly Deputy Keeper

responsible for Rare Book Collections in the British Museum Library, and has 'retired' to become Librarian of Westminster Abbey. Mr Timings has taught Administrative History in the courses for Archives students since 1956 and has helped with admissions interviews. He is to continue at the Public Record Office where he has for long been in charge of the Search Rooms.

Dr Ernest Wiesenberg, of the Department of Hebrew and Jewish Studies, who retires after twenty-eight years' service, first as Lecturer and then since 1963 as Reader, is an excellent example of classical talmudic scholarship. Talmudic scholars had the ability to master by heart the full text of the Mishnah, Babylonian and Jerusalem Talmud, and any time quotations were required they could produce them as if by magic from their hats. Dr Wiesenberg still performs the same sort of erudition as rabbis in the Middle Ages and the early Nineteenth Century. In addition, he has the advantage of a remarkable mastery of a variety of languages from Greek, Latin, Hebrew, Aramaic, Judaeo-Arabic, German, Hungarian and French. There is something of an exceptionally striking old-world charm in his personality and manners. He has been working part-time during the last few years on the great project at Cambridge, of editing a very comprehensive catalogue of the Genizah in the Cambridge University Library, in which his immense talmudic and midrashic erudition will be invaluable in identifying these fragments.

W. H. F. Nicholls retired after service with the College extending over forty-eight years. Appointed in the College Office in 1928, he joined the Accounts Department in 1931, where he became Chief Assistant Accountant in 1963 and Deputy Accountant in 1972. His work brought him into contact with members of all sections of the College staff, in particular with problems of superannuation, and there are many who have been grateful for his help and advice on both College and personal matters. The smooth introduction of the computerisation of College accounting procedures owed much to his work as project co-ordinator. By his retirement the College loses a senior administrator who has given a lifetime of loyal service.

Mrs Joanna Morgan retired from her post as Catering Officer in the Refectory. She had been with the College since 1955, first as Refectory Manager, when arrangements were in the hands of catering contractors, and from 1958 as Steward of the Refectory (later Catering Officer) on the College staff. Her years were difficult ones, with the construction of the New Refectory in 1961, and more recently with problems of inflation, but she was always able to produce a wide range of services, from a snack to a banquet, and to

inspire in her staff a deep sense of loyalty. Members of the College staff and generations of students will remember her cheerfulness and the tremendous industry, skill and devotion with which she served the College for some twenty years.

RESIGNATIONS

The College Committee lost the services of Sir Edwin Chapman-Andrews at the end of the session. He had been a member of the Committee since 1967, on the nomination of the Fellows of the College, and had also served for many years on the Fellows Committee. His wide experience in public life has made him a most valuable member of our governing body. Mr J. Wickert resigned from the Investments Committee, which he joined in 1972, and which he had served since then as its chairman.

Professor P. R. Banham resigned from the Professorship of History of Architecture in order to take up the post of Chairman of Design Studies in the School of Architecture and Environmental Design of the State University of New York at Buffalo, where he will be Professor of History and Theory of Architecture. His title was conferred in 1969 after service dating from 1962, first as Senior Lecturer and then as Reader. He laid down a firm policy for the role of historian in an architectural school, rejecting synoptic teaching of architectural history in order to teach History as a method and discipline. This enabled full advantage to be taken both of available teaching talent and student interests, since the chosen case-histories could always demonstrate the methodology. It has been a lively and flexible tenure, marked by an entire absence of stuffiness, dealing with the main issues of the moment with great journalistic flair without any loss of methodological rigour. The excitement he communicates is in relating the perspective of history to the on-going momentum of design, summed up in his phrase 'The history of the immediate future'. In his new post he will develop historical programmes sensitive to the problems of engineering an environment.

Professor Harry Harris, who resigned from the Galton Chair of Human Genetics to take the Harnwell Chair in the University of Pennsylvania at Philadelphia, has had long associations with the College. During the period 1947–60 he held honorary appointments in the Galton Laboratory and from 1950 to 1953 was also a Lecturer in the Department of Biochemistry. After appointments at the London Hospital Medical College he held the Chair of Biochemistry at King's College London from 1960 to 1965. He returned to University College in 1965 as Galton Professor of Human Genetics and brought with

him the MRC Human Biochemical Genetics Research Unit, of which he was Honorary Director. Harry Harris is one of the founders of his field of study, the genetic analysis of human biochemical variation. He developed techniques and methods of approach which are leading us towards a better understanding of the biochemical basis of genetic disorders, methods for their diagnosis and rational approaches towards their treatment. His long association with the College will continue in the future with his appointment as Visiting Professor in the Department of Biochemistry.

OBITUARY

We record with regret the death during the year of a number of members and former members of the College. They included two Honorary Fellows and six Fellows.

Lord Holford, Professor of Town Planning from 1948 to 1969, and an Honorary Fellow of the College, died on 17 October 1975, aged 68. Born in South Africa, Bill Holford studied at Liverpool School of Architecture. In 1937, after attending the British School at Rome, he succeeded Patrick Abercrombie to the Leverhulme Chair of Civic Design at the University of Liverpool at the age of thirty. For his contemporaries, this symbolised the triumph of youth. He was knighted in 1953, and received a peerage in 1965, being the first town planner to be so honoured. He aged little over the years, and it was still with almost boyish wonder that he first surveyed the House of Lords near the end of a distinguished career. Bill Holford's unique talents were first recognised outside the academic world by his appointment at the end of the war as Advisor to the newly-formed Ministry of Town and Country Planning. The 1947 planning system owed much to his diplomatic leadership, but the flaws that have since appeared might have been avoided by the enlightened ideas that modesty prevented him from imposing on others. His international reputation as a planner and skilful administrator led to important civic design commissions in Britain and the Commonwealth. The subsequent history of two of these, St Paul's Cathedral Precinct and Piccadilly Circus must, nevertheless, have been a great disappointment to him. Throughout all this activity and other public demands on his time he remained a dedicated, inspiring teacher, with a deep personal interest in College affairs. Bill Holford was both unassuming and magnificent, a highly perceptive scholar, a friend in need, and a devoted husband. It is these very qualities which led to excessive demands on his loyalty, thus leaving all too few products of his creative genius to posterity.

The other Honorary Fellow was Dr D. W. Bronk, the distinguished biophysicist, Foreign Member of the Royal Society, and formerly President of Johns Hopkins University, of the Rockefeller University, New York, and of the National Academy of Sciences, Washington.

The Fellows who died during the year were Sir Edward Asafu-Adjaye, first High Commissioner for Ghana to the United Kingdom; Sir James Cook, formerly Vice-Chancellor of the University of East Africa, Vice-Chancellor of the University of Exeter, and Regius Professor of Chemistry in the University of Glasgow; Professor C. E. Dent, Professor of Human Metabolism and formerly Reader in Medicine at University College Hospital Medical School, and a member of staff in the Department of Biochemistry at the College from 1948 to 1967; Sir Thomas Monnington, President of the Royal Academy since 1966 and a member of the staff of the Slade School from 1949 to 1967; Sir Lalita Rajapakse, formerly High Commissioner for Ceylon in Great Britain; and Sir Mortimer Wheeler, Professor of Ancient History at the Royal Academy of Arts since 1965, formerly Secretary of the British Academy, Honorary Director of the University of London Institute of Archaeology, where he was later Professor of the Archaeology of the Roman Provinces, Director-General of Archaeology in India, Keeper and Secretary of the London Museum, Honorary Lecturer and then Lecturer in British Archaeology at the College from 1927 to 1944.

The College lost by death three of its distinguished professors.

Professor R. J. Smeed died suddenly on 3 September 1976, a few weeks before he was due to retire. He became the first Professor of Traffic Studies at the College when in 1966 he came to head the newly-formed Traffic Studies Research Group established in the Department of Civil and Municipal Engineering with generous financial help from a number of external bodies. His personal reputation in transport following a highly successful career in the Scientific Civil Service was a key factor in attracting this financial support. Prior to his appointment to the Chair of Traffic Studies he had held the posts of Deputy Director at the Road Research Laboratory and Chief Scientist at the Ministry of Land and Natural Resources and he was awarded the C.B.E. in 1966 for his services. Under his dynamic leadership the Traffic Studies Group flourished into one of the leading university centres with a distinctive approach in its emphasis on the application of the scientific method to transport problems. Professor Smeed's ability to generate new ideas for research studies in transport and to attract the finance, staff and

students for their execution has been the dominant factor in the development of these studies. He also extended the teaching of transport studies in the College by initiating new courses for Mathematics and Statistics undergraduates as well as promoting the existing studies for Civil Engineering and Planning students. Professor Smeed was in constant demand for advice on transport matters from numerous national and international bodies, but he always gave generously of his time as an enthusiastic member of that most controversial of College committees, the Car Parking Committee. His intellectual stimulation and wise counsel will be greatly missed by all his colleagues in the College.

Professor E. H. Thompson died suddenly on 9 April 1976. In a brilliant academic career he went up to Downing College, Cambridge, where he obtained a first in the Mechanical Sciences Tripos in 1932. (Later, in 1969, he was to be awarded an Sc.D. by his University.) There followed a distinguished career in the Royal Engineers, where he was awarded the O.B.E., and twice mentioned in despatches, and in May 1951 he was appointed to the Chair of Photogrammetry and Surveying at this College, a post he held until his death, one year before he was due to retire. His honours included the Patron's medal of the Royal Geographical Society, a Council of Industrial Design award for his 'Thompson Watts Plotter', and honorary membership of the Photogrammetric Society and of the International Society of Photogrammetry. Perhaps he will be best known for his brilliant editorials in the *Photogrammetric Record*, and for his prowess as a lecturer, giving lucid and interesting explanations of the most abstruse problems. Even his textbook on matrix algebra contains flashes of his humour. He had the rare gift of seeing the essentials of a problem and an argument with him was a thrilling experience. A visiting foreign professor said just after his death 'you might not agree with what he was saying, but you generally had to admit he was right'. Those who dismissed him as a dilettante did him an injustice, for his apparently flippant remarks had a disconcerting ring of truth about them. He first chose a military career and became a successful soldier; out of this rose his academic career in a field in which he became pre-eminent. But no matter what he would have chosen to do, he would have done it supremely well, and would have found just as many admirers and friends.

Professor Duccio Turin, who died on 29 July 1976 from injuries received in a motor car accident in Italy, was the first Professor of Building in the School of Environmental Studies. His tragic death at the age of fifty leaves a gap that will be difficult to fill. The College

has lost a brilliant teacher and outstanding scholar, his colleagues and students a generous, lively and stimulating friend. When Duccio Turin joined the College in 1965, he brought to his new task experience from three continents, Europe, Africa and Latin America, and the reputation of being an authority in two rarely combined subjects: architecture and economics. This made him an ideal choice for the newly-founded London Master Builders Chair of Building. During his London years, he concentrated his efforts on fostering greater understanding of four related subjects: the nature of the building process, the structure of the building industry in Britain, the role of architects within the building process and, based on his earlier third world experience, the role of the building industry in economic and social development. He also continued his activities as consultant to Rumania, Cuba, Kenya, Sri Lanka—and to international agencies such as the UN Centre for Housing, Building and Planning, the International Labour Office and the UN Industrial Development Organisation. In 1974, the United Nations borrowed Duccio Turin's services for the preparations of the International Conference on Human Settlements, popularly known as HABITAT, held in Vancouver in June 1976. He was due to resume his teaching at the College this October, after the successful completion of his UN assignment. Professor Turin's colleagues and students hope to assemble a complete collection of his writings in the School of Environmental Studies.

Among former members of the academic staff who died were Professor John Macmurray, Grote Professor of Philosophy of Mind and Logic from 1928 to 1944 and later Professor of Moral Philosophy in the University of Edinburgh; and the following members, all of whom had also been students of the College: Dr A. Armitage, a member of staff from 1927 to 1969 in the Department of History and Philosophy of Science, where he was Reader from 1957; Professor M. Maizels, who held an honorary appointment in the Department of Biophysics from 1964 to 1971; Emeritus Professor N. C. Scott, from 1937 to 1944 a Lecturer in the Department of Phonetics; A. L. M. Sowerby, a member of the staff of the Department of Chemistry from 1920 to 1930; Dr B. W. Thompson, who held honorary appointments in the Department of Mathematics from 1964 to 1966 and in 1971–72; Franklin White, a member of the staff of the Slade School from 1919 to 1957; and Dr Dorothy M. Wrinch, an Assistant in the Department of Mathematics from 1918 to 1920 and the holder of honorary appointments there from 1920 to 1924 and in the Department of Biochemistry in 1961–62.

Dr Nicolas Malleson, Physician-in-Charge at the Student Health Centre from 1952 to 1959 and one of the pioneers of student health services in this country, died on 3 June 1976, and Dr A. W. Barton, who acted as Schools Liaison Officer from 1965 to 1971, died on 24 August 1976.

In the course of the year the College heard of the death of several former students. Among these were Jesse D. Cast, the portrait painter; Professor E. J. Cohn, a notable and learned figure in the legal and academic world in England and on the continent; W. G. Constable, the art historian, formerly Curator of Paintings at the Boston Museum of Fine Arts, Assistant Director of the National Gallery, and the first Director of the Courtauld Institute of Art; A.St B. Harrison, the architect and town planner; Miss Wilma P. Harte, Under-Secretary, Department of Education and Science; L. R. McColvin, formerly Librarian of City of Westminster Public Libraries; Air Vice-Marshal F. H. M. Maynard; Sir John Parkinson, consultant physician; Professor T. Seshadri, Emeritus Professor of Chemistry, University of Delhi; Peter Startup and Cecil Thomas, sculptors; J. M. Watt, the cartoonist; and H. W. S. Wright, surgeon in London.

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1 AUGUST 1975—31 JULY 1976

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P. C. Burnham, M.A., PH.D., Lecturer in Anthropology*
J. H. Burns, M.A., PH.D., Professor of the History of Political Thought
G. Burnstock, PH.D., D.SC., F.A.A., Professor of Anatomy
P. H. W. Butterworth, PH.D., Reader in Biochemistry*
F. J. J. Cadwallader, PH.D., Senior Lecturer in Laws*
L. Castillejo, M.A., B.SC.(ENG.), Professor of Physics
B. Cheng, LL.D., LIC.-EN-DR., Professor of Air and Space Law
I. R. Christie, M.A., Professor of Modern British History
Patricia H. Clarke, B.A., D.SC., F.R.S., Professor of Microbial Biochemistry
D. C. Cooper, PH.D., F.B.C.S., Professor of Computer Science
R. E. Cooper, PH.D., Lecturer in Chemistry*
P. E. Corbett, M.A., Yates Professor of Classical Art and Archaeology
P. D. Cowan, DIPL.ARCH., PH.D., Professor of Planning Studies
A. L. Cullen, O.B.E., D.SC.(ENG.), C.ENG., F.C.G.I., F.I.E.E., F.I.E.E.E., F.INST.P., Pender Professor of Electrical Engineering

*Elected for membership during Session 1975–76 (College Statute 24(4), Regulation 29). §Appointed to membership under College Statute 24(3). †Fellow of the College. ‡Hon. Fellow of the College.

J. S. Cummins, PH.D., Professor of Hispanic Studies
S. P. Datta, B.SC., M.B., B.S., Professor of Medical Biochemistry, *Vice-Provost*†
A. G. Davies, D.SC., F.R.I.C., Professor of Chemistry
D. E. N. Davies, D.SC., C.ENG., F.I.E.E., F.I.E.R.E., Professor of Electrical Engineering
A. M. J. Davis, M.A., PH.D., Lecturer in Mathematics*
D. G. Davis, PH.D., Senior Lecturer in Physics and Astronomy*
G. D. Dawson, M.SC., M.B., CH.B., Professor of Physiology
Cecily de Monchaux, PH.D., Senior Lecturer in Psychology*
D. T. Donovan, D.SC., Yates-Goldsmid Professor of Geology
M. Mary Douglas, M.A., D.PHIL., Professor of Social Anthropology
G. C. Drew, M.A., Professor of Psychology
C. D. Easteal, B.SC., M.ENG., Senior Lecturer in Statistics and Computer Science*
S. A. Fender, M.A., PH.D., Lecturer in English Language and Literature*
R. C. Fisher, M.A., PH.D., Senior Lecturer in Zoology and Comparative Anatomy*
P. G. Foote, M.A., FIL.DR., Professor of Scandinavian Studies
J. R. Forrest, M.A., D.PHIL., C.ENG., M.I.E.E., M.INST.P., Lecturer in Electronic and Electrical Engineering*
J. W. Fox, PH.D., F.INST.P., Senior Lecturer in Physics and Astronomy*
J. Garside, PH.D., C.ENG., M.I.CHEM.E., Lecturer in Chemical Engineering*
A. C. Gimson, B.A., Professor of Phonetics†
G. P. Goold, A.M., PH.D., Professor of Latin
Lawrence Gowing, C.B.E., M.A., Slade Professor of Fine Art
E. G. Gray, B.SC., PH.D., F.R.S., Professor of Anatomy (Cytology)
A. L. Greenbaum, PH.D., D.SC., Professor of Biochemistry
A. H. Griffiths, B.A., Lecturer in Greek and Latin*
G. V. Groves, M.A., PH.D., Professor of Physics
J. R. Hale, M.A., F.S.A., Professor of Italian
E. W. Handley, M.A., F.B.A., Professor of Greek
R. D. Harkness, B.SC., M.B., B.S., M.R.C.S., L.R.C.P., Professor of Physiology†
D. R. Harris, M.A., B.LITT., PH.D., Reader in Geography*
E. J. Harris, PH.D., D.SC., D.I.C., Reader in Biophysics*
H. Harris, M.A., M.D., F.R.C.P., F.R.S., Galton Professor of Human Genetics
N. B. Harte, B.SC.(ECON.), Lecturer in Economic History*
P. D. Henderson, M.A., Professor of Political Economy
F. F. Heymann, B.SC.(ENG.), PH.D., F.INST.P., Quain Professor of Physics
Peggie M. Hobson, PH.D., Lecturer in Geography*
Ted Honderich, B.A., PH.D., Reader in Philosophy*
R. G. Hopkinson, B.SC.(ENG.), PH.D., C.ENG., HON.R.I.B.A., F.I.E.E., F.I.H.V.E., P.P.ILLUM.E.S., Haden-Pilkington Professor of Environmental Design and Engineering
J. Hurstfield, D.LIT., Astor Professor of English History†
Sir Andrew Huxley, M.A., D.SC., M.D., F.R.S., Professor of Physiology and Royal Society Research Professor
R. I. Ireland, B.A., Lecturer in Greek and Latin*

*†See footnote on p. 114.

E. R. H. Ivamy, LL.D., Professor of Law†
K. J. Ives, D.SC.(ENG.), PH.D., C.ENG., M.I.C.E., M.A.S.C.E., Professor of Public Health Engineering
D. W. James, M.B., B.S., M.R.C.S., L.R.C.P., Professor of Anatomy
R. E. Jennings, PH.D., Professor of Physics
D. W. J. Johnson, B.A., B.LITT., Professor of French History
M. A. Jones, M.A., D.PHIL., Commonwealth Fund Professor of American History
Sheila Heywood Jones, M.A., PH.D., Lecturer in Psychology*
W. J. D. Jones, B.SC.(ENG.), PH.D., A.R.S.M., D.I.C., A.I.M., Reader in Engineering Metallurgy*
J. L. Jowell, M.A., LL.M., S.J.D., Professor of Public Law
Sir Bernard Katz, M.D., PH.D., D.SC., F.R.C.P., F.R.S., Professor of Biophysics†
K. O. Kemp, B.SC.(ENG.), PH.D., C.ENG., M.I.C.E., M.I.STRUCT.E., Chadwick Professor of Civil Engineering
P. T. Kirstein, D.SC.(ENG.), C.ENG., F.I.E.E., F.INST.P., F.B.C.S., Professor of Computer Systems
O. H. G. Koenigsberger, D.ENG., DIP.ENG., R.I.B.A., M.R.T.P.I., Professor of Development Planning
T. H. Lambert, B.SC.(ENG.), PH.D., HON.R.C.N.C., C.ENG., M.I.MECH.E., Professor of Mechanical Engineering
D. G. Larman, PH.D., D.SC., Professor of Mathematics
D. R. Laurence, M.D., F.R.C.P., Professor of Pharmacology and Therapeutics
Annette C. M. Lavers, PH.D., L.ÈS L., D.E.S., Reader in French*
D. Lewis, D.SC., F.R.S., Quain Professor of Botany
N. Lichfield, B.SC., PH.D., C.ENG., P.P.R.T.P.I., F.R.I.C.S., M.I.MUN.E., Professor of the Economics of Environmental Planning
D. V. Lindley, M.A., Professor of Statistics
J. M. A. Lindon, M.A., Lecturer in Italian*
The Right Hon. Lord Lloyd, Q.C., M.A., LL.D., Quain Professor of Jurisprudence†
D. Lowenthal, M.A., PH.D., Professor of Geography
A. Maccoll, PH.D., D.SC., F.R.I.C., Professor of Chemistry
M. L. McGlashan, PH.D., D.SC., F.R.I.C., Professor of Chemistry
J. H. St J. McIlwaine, B.A., A.L.A., Lecturer in Library, Archive and Information Studies*
A. P. Mathias, PH.D., Professor of Biochemistry
W. R. Mead, D.SC.(ECON.), PH.D., F.D., Professor of Geography
Pauline M. Meadow, M.A., PH.D., Reader in Biochemistry*
R. Miledi, M.D., F.R.S., Professor of Biophysics and Royal Society Foulerton Research Professor
D. J. Millen, PH.D., D.SC., Professor of Chemistry
Karl Miller, M.A., Lord Northcliffe Professor of Modern English Literature
M. A. Millner, B.A., LL.D., B.C.L., Professor of Law
N. A. Mitchison, D.PHIL., F.R.S., Jodrell Professor of Zoology and Comparative Anatomy
J. L. Mongar, PH.D., Professor of Pharmacology

*†See footnote on p. 114.

J. W. Mullin, PH.D., D.SC., C.ENG., F.I.CHEM.E., F.R.I.C., Professor of Chemical Engineering
R. J. C. Munton, PH.D., Lecturer in Geography*
J. Musgrove, B.ARCH., R.I.B.A., Professor of Architecture
J. A. North, M.A., D.PHIL., Lecturer in Ancient History*
J. E. Parkin, PH.D., Lecturer in Chemistry*
J. W. Pendered, B.SC.(ENG.), PH.D., Senior Lecturer in Mechanical Engineering*
E. A. Power, D.SC., PH.D., Professor of Mathematics
Randolph Quirk, C.B.E., D.LIT., FIL.DR., F.B.A., Quain Professor of English Language and Literature†
B. R. Rabin, M.SC., PH.D., Professor of Biochemistry
P. M. Rattansi, M.A., PH.D., Professor of History and Philosophy of Science
K. J. Rawson, R.C.N.C., C.ENG., F.R.I.N.A., Professor of Naval Architecture
J. H. Ridd, PH.D., D.SC., F.R.I.C., Professor of Chemistry
R. W. Rideout, PH.D., Professor of Labour Law
C. A. Rogers, D.SC., F.R.S., Astor Professor of Mathematics†
P. N. Rowe, B.SC.(TECH.), PH.D., D.SC.(ENG.), C.ENG., F.I.CHEM.E., D.I.C., Ramsay Memorial Professor of Chemical Engineering
E. C. Ryder, M.A., LL.B., Professor of English Law
P. A. Samet, PH.D., F.B.C.S., F.I.M.A., Professor of Computer Science
E. H. Scamell, LL.M., Professor of English Law
A. F. D. Scott, B.SC., Research Assistant in Physics and Astronomy*
J. W. Scott, B.A., A.L.A., Librarian
M. A. Screech, D.LITT., Fielden Professor of French Language and Literature
M. J. Seaton, PH.D., F.R.S., Professor of Physics†
J. M. Simmie, B.SC.(ECON.), M.PHIL., Lecturer in Environmental Studies*
A. D. G. Smart, M.A., DIP.T.P., F.R.T.P.I., A.R.I.C.S., Professor of Urban Planning
R. J. Smeed, C.B.E., PH.D., Professor of Traffic Studies‖
C. A. B. Smith, M.A., PH.D., Weldon Professor of Biometry
D. G. Smith, PH.D., Lecturer in Botany and Microbiology*
H. S. Smith, M.A., Edwards Professor of Egyptology
F. Sondheimer, PH.D., F.R.S., Professor of Chemistry and Royal Society Research Professor
J. Spraos, M.A., Professor of Political Economy
Hannah Steinberg, PH.D., Professor of Psychopharmacology
D. J. Stephens, LL.M., Lecturer in Laws*
J. P. Stern, M.A., PH.D., LITT.D., Professor of German
K. Stewartson, M.A., PH.D., F.R.S., Goldsmid Professor of Mathematics
M. Stone, PH.D., Professor of Probability and Statistics
K. W. Swart, LITT.D.(LEIDEN), Professor of Dutch History and Institutions
M. S. Symes, M.A., DIP.ARCH., PLAN.DIP., R.I.B.A., Lecturer in Environmental Studies*
K. Taylor, PH.D., Lecturer in Botany and Microbiology*
J. A. C. Thomas, M.A., LL.B., Professor of Roman Law

*†See footnote on p. 114. ‖Died 3 September 1976.

E. H. Thompson, O.B.E., M.A., SC.D., F.R.I.C.S., Professor of Photogrammetry and Surveying§
M. L. Tobe, PH.D., D.SC., F.R.I.C., Professor of Chemistry
D. A. Turin, DIPL.ARCH., S.C.A., F.I.O.B., London Master Builders Professor of Building¶
E. G. Turner, C.B.E., M.A., DR.PHIL.ET. LETTRES, D.ÈS L., F.B.A., Professor of Papyrology
V. P. Underwood, PH.D., D.ÈS L., Professor of French
C. A. Vernon, D.SC., Professor of Chemistry
B. C. Vickery, M.A., F.L.A., Professor of Library Studies
S. P. Waldram, B.TECH., M.S., PH.D., Lecturer in Chemical Engineering*
K. Walker, M.A., PH.D., Lecturer in English Language and Literature*
P. D. Wall, M.A., D.M., Professor of Anatomy
G. L. Watson, M.A., PH.D., D.SC., Professor of Mathematics
N. F. Watson, B.ARCH., R.I.B.A., Bartlett Professor of Architecture
R. A. Webster, PH.D., Senior Lecturer in Pharmacology*
D. J. B. White, PH.D., Senior Lecturer in Botany and Microbiology†*
J. E. C. T. White, M.A., PH.D., Durning-Lawrence Professor of the History of Art
G. P. Wibberley, C.B.E., M.S., PH.D., Ernest Cook Professor of Countryside Planning
D. R. Wilkie, M.D., M.B., B.S., F.R.C.P., F.R.S., Jodrell Professor of Physiology†
Elizabeth M. Wilkinson, PH.D., LL.D., D.LITT., F.B.A., Professor of German
P. G. Williams, B.SC., Lecturer in Mathematics*
D. M. Wilson, M.A., F.S.A., Professor of Medieval Archaeology
R. Wilson, PH.D., F.R.S., Perren Professor of Astronomy
K. Wolfenden, M.A., Professor of Information Processing
Richard Wollheim, M.A., F.B.A., Grote Professor of Philosophy of Mind and Logic
S. M. Zeki, B.SC., PH.D., Lecturer in Anatomy and Embryology and Royal Society Henry Head Research Fellow*

*†See footnote on p. 114. §Died 9 April 1976. ¶Died 29 July 1976.

ASSESSORS

The Sub-Deans of the Faculties:
Arts: G. F. Arnold, B.A.
Laws: D. J. Stephens, LL.M.§
Science: C. Dodd, PH.D.†
Engineering: H. Marriott, B.ENG., B.SC.(ECON.), C.ENG., F.I.E.E.
Medical Sciences: N. R. Saunders, PH.D., M.B., B.S.
Environmental Studies: B. B. Nutt, B.A.

Student Assessors—during the period to 31 March 1976:

Diana Faber	R. P. Morgan, B.SC.	J. E. P. Ruffer
Jacqueline A. Gilbert	Carol E. Morrison	S. P. Stone
P. J. Goddard, B.SC.	P. A. Probyn	T. K. Weber
A. Jones¶	D. R. Proud	

Student Assessors—during the period from 1 April 1976:

J. W. Beale	J. A. Horwood	B. F. Smith
J. R. Drane	A. W. Howe	Sarah M. Thurlbeck
P. Engelman¶	P. B. Matthews	I. F. Tunnacliffe
Sally J. Hibbin, B.A.	S. F. Rayner, B.A.	

†See footnote on p. 114. ¶President of the Union. §Also an elected member (College Statute 24(4), Regulation 29).

APPENDIX III

HONORARY FELLOWS AND FELLOWS

The following elections were made in 1976:

HONORARY FELLOWS

Professor Sir Harrie Stewart Wilson Massey, F.R.S., Emeritus Professor and formerly Quain Professor of Physics, University College London.

Professor Arnaldo Dante Momigliano, K.B.E., F.B.A., Emeritus Professor and formerly Professor of Ancient History, University College London.

FELLOWS

Mr Kenneth Cavendish Christofas, C.M.G., M.B.E., Director-General in the Secretariat of the Council of Ministers, E.E.C.

Professor Alexander Dalgarno, F.R.S., Professor of Astronomy and Chairman of Department of Astronomy, Center for Astrophysics, Harvard University.

Mr Maxwell Philip Ellis, F.R.C.S., Consulting Surgeon, Royal National Throat, Nose and Ear Hospital, and Central Middlesex Hospital; formerly Dean, Institute of Laryngology and Otology.

Dr Cyril Hilsum, Chief Scientific Officer, Royal Radar Establishment, Malvern.

Mr Albert Sidney Hornby, O.B.E., Author of standard dictionary and text books for overseas students learning English.

Dr Alfred James Kennedy, Director of the British Non-ferrous Metals Technology Centre.

Professor Bernard Lewis, F.B.A., Cleveland Dodge Professor of Near Eastern Studies at Princeton University; formerly Professor of the History of the Near and Middle East, School of Oriental and African Studies.

Mr Edward Lindsay Carson Mullins, O.B.E., Secretary, Editorial Board, The History of Parliament Trust; Member of Council and former President of Friends of University College London.

Professor Eric John Ross, F.R.C.P., Professor of Endocrinology, University College Hospital Medical School.

Sir John Rothenstein, C.B.E., Writer; formerly Director of the Tate Gallery.

APPENDIX IV

PUBLIC LECTURES

ENDOWED LECTURES

COMMONWEALTH FUND LECTURE

Professor Michael G. Kammen, Cornell: 'The American Revolution and the Historical Imagination'

DOROTHEA COKE MEMORIAL LECTURE IN NORTHERN STUDIES

Professor Henry Loyn, University College, Cardiff: 'Scandinavians in Wales in the Viking Age'

FREUD MEMORIAL LECTURES IN PSYCHOANALYSIS

Professor Roy Schafer, Yale: 'The Psychoanalytic Life History'; 'Free Association'; 'Self-Control'; 'Impotence, Frigidity and Sexism'; 'Self-Love and Self-Hatred' (five lectures)

THE NEALE LECTURE IN ENGLISH HISTORY

Professor J. H. Hexter, Yale: 'The "Anglo-American" Parliament of 1628'

LORD NORTHCLIFFE LECTURES IN LITERATURE

Mr L. P. Wilkinson, Cambridge: 'Classical Approaches to Modern Topics' (four lectures)

SETON MEMORIAL LECTURE

Sir John Pope-Hennessy, Director, British Museum: 'Andrea della Robbia'

SHEARMAN MEMORIAL LECTURES

Professor Hilary Putnam, Harvard: 'Meaning and Truth' (three lectures)

WILLIAM TOWNSEND MEMORIAL LECTURE

Professor Norbert Lynton, Sussex: 'Art and its Publics'

INAUGURAL LECTURES

Professor Lawrence Gowing, Slade Professor of Fine Art: 'Temperament, Tradition and the Case of Mr Harris'

Professor P. D. Henderson, Professor of Political Economy: 'Two British Errors: their probable size and some possible lessons'

LUNCH-HOUR LECTURES AND FILMS

LECTURES

Professor E. A. Ash: 'The Limits of Growth—Revisited'
Professor R. L. F. Boyd: 'Ionospheres of Dead Stars and Living Galaxies'
Dr M. Coffey: 'The Roman Satirists and their European Successors: the Uncritical Path'
Mr G. A. Cohen: 'Why Capitalism is Irrational'
Mrs Joyce P. Crick: 'Auden and Goethe'
Professor D. E. N. Davies: 'Rail Transport—an engineering dilemma for a social dis-service'
Professor Lawrence Gowing: 'Constable and the Imitative Art'
Mr J. A. Graham-Campbell: 'Viking Silver'
Dr D. R. Harris: ' "Don't rubbish the top end" or Ethnoecological explorations across Torres Strait'
Dr A. W. Johnston: 'Literacy goes West: the Greeks learn their letters'
Professor M. A. Jones: 'The Declaration of Independence, 1776'
Professor D. R. Laurence: 'New Drugs: Efficacy and Safety'
Dr J. Lewins: 'Nuclear Power Safety Methodology'
Professor N. Lichfield: 'The Land Community Act: help or hindrance?'
Dr C. J. Lucas: 'Changing Concepts in Student Mental Health'
Dr G. T. Martin: 'Pharaoh as Commoner: Excavations at the Saqqara Tomb of Horemheb, 1975'
Mr A. N. Maxwell: 'Science and Human Need'
Professor N. A. Mitchison: 'Birth Control by Immunity'
Professor P. M. Rattansi: 'Science and Culture—a seventeenth century debate'
Professor R. J. Smeed: 'Factors Controlling the Number of Road Accidents'
Professor J. P. Stern: 'Nietzsche and the Idea of Metaphor'
Mr A. J. P. Taylor: 'The Left in the Thirties'
C. V. Wedgwood: 'Some Thoughts on Writing History'
Dr M. K. Wells: 'Keeping an Eye on Mount Etna'
Professor Richard Wollheim: 'Freud and Philosophical Criticism'

FILMS*

'University College London' (a film of life and work in a large London college)
'Tribute to Richard Massingham' (a film compilation)
'Rupture' (Pierre Etaix comedy); 'Happy Anniversary' (Pierre Etaix comedy); 'The Critic' (Ernest Pintoff cartoon)
'The Music Box' (Laurel and Hardy film)
'Apollo 8' (journey around the Moon)
'La Jetée' (film by Chris Marker)
'Another Fine Mess' (Laurel and Hardy film)

LECTURES ARRANGED BY COLLEGE DEPARTMENTS

ENGLISH LANGUAGE AND LITERATURE

Mr Stuart Hampshire, Oxford: 'Joyce and Vico'

*All but the first film in the programme were introduced by Miss Suzanne Budgen.

LAWS

Mr D. J. Hayton, Cambridge: 'Land Law: Getting Priorities Right'

Mr I. S. Stephenson, Newcastle upon Tyne: 'The Fallibility of Company Accounts'

SCANDINAVIAN STUDIES

Dr Ada Polak, Deputy Curator in Britain of the Arts and Crafts Museum of Norway: 'The Decorative Arts in Scandinavia 1530–1830'

APPENDIX V

NUMBERS OF STUDENTS, 1975–76

	Under-graduate	*Post-graduate*	*Totals*
Faculty of Arts	1,267 (238)	488 (177)	1,755 (415)
Department of Political Economy ..	196 (0)	31 (3)	227 (3)
Slade School of Fine Art	88 (5)	100 (12)	188 (17)
	1,551 (243)	619 (192)	2,170 (435)
Faculty of Science	1,219 (4)	*633 (141)	1,852 (145)
Faculty of Medical Sciences	291 (0)	2 (1)	293 (1)
Faculty of Engineering	366 (0)	232 (55)	598 (55)
Faculty of Laws	285 (17)	†149 (38)	434 (55)
Faculty of Environmental Studies ..	185 (25)	232 (45)	417 (70)
	3,897 (289)	‡1,867 (472)	5,764 (761)

The figures in brackets indicate the number of part-time students included in the total under each head.

*This figure includes 82 full-time and 24 part-time students working in the College Faculty of Medical Sciences who were registered in the University Faculty of Science.

†This figure includes 10 full-time students studying for the M.Sc. in International Relations who were registered in the University Faculty of Economics.

‡Of this number 1,035 full-time students and 439 part-time students were registered for higher degrees of the University of London; the remainder were working for higher diplomas of the University or of the College, or for the higher degrees of other universities or were engaged in research work, or attending postgraduate lecture courses.

APPENDIX VI

GEOGRAPHICAL DISTRIBUTION OF STUDENTS, SESSION 1975–76

	Under-graduate	*Post-graduate*	*Totals*
UNITED KINGDOM	3,469	1,144	4,613
BRITISH COMMONWEALTH OF NATIONS			
Australia	3	27	30
Bangladesh	3	13	16
Canada	11	44	55
Cyprus	29	11	40
Hong Kong	37	15	52
India	4	23	27
Malaysia	42	5	47
New Zealand	0	12	12
Nigeria	4	21	25
Sri Lanka	11	7	18
19 other countries	42	27	69
OTHER PARTS OF THE WORLD			
Egypt	3	17	20
France	23	6	29
Greece	25	72	97
Iran	18	38	56
Iraq	0	20	20
Israel	6	10	16
Italy	7	13	20
Japan	7	10	17
Mexico	2	15	17
Pakistan	8	22	30
Portugal	3	9	12
South Africa	3	17	20
Spain	8	5	13
Sudan	1	9	10
Turkey	6	15	21
U.S.A.	54	99	153
Venezuela	4	12	16
West Germany	14	17	31
51 other countries	50	112	162
	3,897	1,867	5,764

SUMMARY

United Kingdom	4,613
British Commonwealth of Nations	391
Other parts of the world	760
	5,764

ADMISSION OF FIRST DEGREE STUDENTS SESSION 1975–76

FACULTY OF ARTS	*Students admitted October 1975*
B.A. Honours	
Ancient History & Social Anthropology	2
Anthropology & Linguistics	3
Archaeology—Anglo-Saxon and early medieval European	8
Classics	12
Classics & Ancient History	1
English	56
English & History of Art	7
English & Linguistics	1
Fine Art	21
French	28
French & History of Art	1
French & Linguistics	1
French & Philosophy	2
Geography	58
German	18
German & History of Art	1
German & Linguistics	3
German & a Scandinavian Language	7
Hebrew	3
History (Ancient & Medieval)	4
History (Medieval & Modern)	39
History & History of Art	7
Italian	6
Italian & History of Art	4
Modern Iberian & Latin American Regional Studies	12
Norwegian & Icelandic	2
Philosophy	24
Philosophy & Economics	3
Philosophy & History of Art	4
Philosophy & Linguistics	2
Scandinavian Studies	8
	348
B.Sc. in the University Faculty of Economics	
Economics	43
Economics & Economic History	5
Economics & Geography	15
Economics & Social Anthropology	4
Economics & Statistics	8
	75

	Students admitted October 1975
FACULTY OF LAWS	
LL.B.	102
FACULTY OF SCIENCE	
B.Sc. Degree	
Anthropology	32
Astronomy	30
Astronomy/Physics	13
Biochemistry	23
Biology	16
Botany	2
Chemistry	38
Chemistry/Physics	6
Computer Science	8
Genetics/Microbiology	5
Genetics/Zoology	2
Geography	25
Geology	15
Human Sciences	9
Mathematics	32
Medicinal Chemistry	8
Microbiology	13
Pharmacology	7
Physics	30
Physics (Applied)	3
Physiology	7
Psychology	63
Statistics	8
Statistics & Computer Science	5
Zoology	17
	417
FACULTY OF ENGINEERING	
B.Sc. (Eng.)	
Civil & Municipal Engineering	39
Electronic & Electrical Engineering	29
Electronic Engineering with Computer Science	3
Mechanical Engineering	12
Mechanical Engineering (Naval Architecture)	14
Chemical Engineering	24
Biochemical Engineering	9
	130
FACULTY OF MEDICAL SCIENCES	
M.B., B.S. (Preclinical)	116
2nd B.D.S.	51
	167
FACULTY OF ENVIRONMENTAL STUDIES	
B.Sc. Degree in Architecture, Planning, Building and Environmental Studies	64
Total	1,303

UNIVERSITY FIRST DEGREE AND DIPLOMA AWARDS
1 OCTOBER 1975 — 30 SEPTEMBER 1976

FACULTY OF ARTS

B.A. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*2nd Class Honours Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Anglo-Saxon Archaeology	—	4	3	—	—	7
Archaeology	—	2	—	—	—	2
Classics	—	5	3	—	—	8
English	3	21	10	5	—	39
French	3	12	9	4	—	28
Geography	3	15	26	2	1	47
German	3	5	5	1	—	14
Hebrew	—	1	—	1	—	2
Hebrew Literature and Jewish History	—	1	2	—	—	3
History	5	29	10	1	—	45
Italian	—	4	3	—	—	7
Modern Iberian and Latin American Regional Studies	—	2	5	1	—	8
Philosophy	1	11	10	1	—	23
Scandinavian Studies	—	3	4	2	—	9
Ancient History & Social Anthropology	—	1	1	—	—	2
Anthropology and Linguistics	2	1	3	—	—	6
English and History of Art	1	2	1	—	—	4
English and Linguistics	—	1	3	—	—	4
French and History of Art	—	1	—	—	—	1
French and Philosophy	—	—	1	—	—	1
German and History of Art	—	—	2	—	—	2
German and Linguistics	2	—	1	1	—	4
German and Norwegian	—	1	—	—	—	1
German and Swedish	—	—	1	—	—	1
History and History of Art	1	1	2	—	—	4
Italian and History of Art	1	—	—	—	—	1
Norwegian and Icelandic	—	—	1	—	—	1
Philosophy and Greek	—	2	—	—	—	2
Philosophy and History of Art	—	2	—	1	—	3
Philosophy and Linguistics	—	1	—	—	—	1
	25	128	106	20	1	280

B.A. Degree (Aegrotat)	*Pass*	*Total*
	4	4

University Diploma in Fine Art: 17 students passed.

FACULTY OF LAWS

LL.B. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*2nd Class Honours Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
	2	19	42	12	3	78

FACULTY OF MEDICINE

Basic Medical Sciences and Pharmacology Examination: 115 students passed.
Second Examination for Dental Degrees: 67 students passed.

FACULTY OF SCIENCE

B.Sc. Degree	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
Anatomy	6	4	—	—	—	10
Anthropology	2	10	18	1	—	31
Applied Physics	1	—	2	4	—	7
Architecture, Planning, Building and Environmental Studies	1	15	11	9	—	36
Astronomy	1	6	5	2	—	14
Biochemistry	3	8	9	2	—	22
Biology	—	2	1	—	—	3
Botany	—	1	4	—	—	5
Chemistry	11	9	7	18	2	47
Chemistry and Physics	1	1	4	1	—	7
Genetics	—	1	2	—	—	3
Geography	2	9	16	2	—	29
Geology	2	3	6	6	—	17
Human Biology	2	5	—	—	—	7
Immunology	—	1	5	1	—	7
Mathematics	6	4	15	7	2	34
Microbiology	2	7	10	2	—	21
Pharmacology	3	6	4	1	—	14
Physics	1	4	1	3	4	13
Physiology	2	15	5	—	—	22
Psychology	6	26	21	—	—	53
Statistics	2	1	1	2	1	7
Statistics and Computer Science	—	3	1	2	—	6
Zoology	5	10	10	6	—	31
	59	151	158	69	9	446

FACULTY OF ENGINEERING

B.Sc. (Engineering) Degree	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
Biochemical Engineering	—	2	2	1	—	5
Chemical Engineering	2	3	5	1	3	14
Civil, Structural and Environmental Engineering	3	11	16	4	7	41
Electronic and Electrical Engineering	4	5	7	5	7	28
Mechanical Engineering	—	3	—	2	3	8
Naval Architecture	1	3	1	—	3	8
	10	27	31	13	23	104

FACULTY OF ECONOMICS

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
B.Sc. (Economics) Degree	1	10	30	9	—	50
B.Sc. (Economics) Aegrotat	—	—	—	—	1*	1

*Retrospectively awarded to 1975.

UNIVERSITY HIGHER DEGREE AND HIGHER DIPLOMA AWARDS
1 OCTOBER 1975—30 SEPTEMBER 1976

FACULTY OF ARTS

Ph.D. *English Language and Literature:* Joan K. Hughes, Mary L. Pfaelzer, Rebecca C. Rodolff, Philip J. M. Sturgess, Peter J. Vernon. *French Language and Literature:* Catherine A. Baudino, Caren E. Steinlight. *Geography:* Michael Parks. *German:* Isabel A. White. *Greek:* Georgia Xanthakis-Karamanos. *Hebrew and Jewish Studies:* Garry S. Gibson. *History:* Juan R. Couyoumdjian, Linda M. Kirk, Mervyn A. Lawless, Francis J. McLynn, Victoria G. Sorsby. *School of Library, Archive and Information Studies:* Stephen E. Robertson. *Philosophy:* Carol Cameron, John M. McMurtry. *Phonetics and Linguistics:* Evelyn R. M. Abberton, Eirian C. Davies, Evelyn G. Golding, †Anne Judge, Geoffrey K. Pullum, Olav A. Rees, Henry Waring. [26]

M.Phil. *Anthropology:* §Jeanette A. Kupfermann. *Environmental Studies:* Robert S. Haynes. *School of Environmental Studies* (*Town Planning*)*:* David L. Audsley, Terence R. Barry, Peter B. Bourdillon, Jane M. Clifford, Bernard G. Cohen, Robert H. Dixon, Jane R. Elson, Pedro C. S. George, Adam J. Gough, Gabriele Griesbach, Susan M. Holliday, Peter E. Langley, Marie Lessard, Paul A. McCreery, Richard J. Masters, Margaret B. Nield, Frances L. Reed, Joy E. Reynolds, Alexander Robertson, Deborah L. Stephens, Carol A. Stevens, Ian G. Symons, Stephen J. Wood, Alice Woo Tong Tao Lan, Ian A. Wray. *Hebrew and Jewish Studies:* Sheila Spain. *School of Library, Archive and Information Studies:* Nazir Ahmad, Sylvia Simsova. *Philosophy:* Jennifer A. Hornsby, Paul A. Taylor. *Phonetics and Linguistics:* Andrew R. Butcher. *Scandinavian Studies:* Gudrún Sveinbjarnardóttir. [34]

M.A. *Architecture:* Alan D. Bonner, Robin E. Dods. *Area studies:* Annaliese J. Baker, Anthony A. Burns, Jose F. Garcilita Castillo, Paul A. Goudy, Robert Leigh, Maria-Therese McMonagle, Dominique C. Ridley, Yolanda S. D. Semprum, Maurice P. Shuman, Robert A. Templeton. *Classics:* Paul Naiditch. *English:* Sandra E. Bale, Clare S. Fletcher, Ronald G. Hardie, Beate C. Mirow, ‡Anne D. Montgomery. *German:* Suzanne E. Oberholzer, *Ursula Riniker, Evelyn W. H. Witney. *History of Art:* ‡Mary Alexander, ‡Suzanne Brill, Nicholas E. Dawton, Pamela A. Hardie, Kenneth T. Hutchinson, ‡Kathy D. Kajander, ‡Sarah A. Kent, David G. Lee, ‡Katherine H. Manasian, ‡Vicente Molina Foix, ‡Rosemarie Mulcahy, ‡Diana Norman, Pamela G. Nunn, Niamh M. M. O'Sullivan, ‡Duncan Scott, Sylvia A. Wright. *Library and Information Studies:* Joyce M. Banks, Lynne J. Brindley, Paul V. Bunn, Ch'ng Saw Keok, Dorothy J. Clayton, Peggy A. Goss, *Stephen G. Haw, Catherine L. J. Keyzer, Edmund M. B. King, Jaroslava

*Awarded mark of Distinction. †Also registered at another Institution. §Also working in another Department. ‡Awarded 1974–75, but not included in Annual Report for that year.

Lambert, Charles H. Mountford, John M. Newa, Yung J. Park, Robert L. V. Parslow, Janet S. Rennie, Eileen H. Robbins, Paul E. Scarsbrook, Anastasia Tsoutsou, *Graham H. Whitaker, Sheila M. M. Wickham. *Linguistics:* Richard D. Gilbey, *Judith L. Klavans-Rekosh, Jill P. Lake, Christopher S. Lee, *Maria R. B. Vasconcelos. *Phonetics:* Sophia A. Adjaye, Yoshiko Horie, Michael Walton. [65]

University Postgraduate Diplomas: Archive Studies 13¶; Classical Archaeology 1; Egyptology 1; Fine Art 39; Librarianship 1‡; Linguistics 10.

FACULTY OF ECONOMICS

Ph.D. *Laws:* Robert L. Bleimann, Toivo Miljan. [2]

M.Sc. *Economics:* Alexander D. Adamson, John A. Banfield, Theoni Boura, Hugo A. Bustamante Butron, Naila Kabeer, Nicolas Kahale, Murilo B. Kammer, Morsheda Karim, Charles H. Russell, *Philip H. Small, Ralph Wilkinson, William C. R. Wilson. *International Relations:* Esther H. Mendelssohn. [13]

FACULTY OF LAWS

Ph.D. Bob A. Anamah, Chew Peng Hui, Bhubaneswar Dutta, Michael O'D. Mungovan, Richard B. L. Prior. [5]

LL.M. Basilio Alo, Pratap C. Amin, *Ross L. Anderson, Robert C. Arnold, *Steven R. Bailey, Christopher M. Bean, Patricia T. Bearcroft, Jose F. Beauchamp Gonzalez, Luigi Belvederi, Triantafillia-Sophia Botsivali, Spyridon Camberos, John B. Carter, Colin V. Croly, Kuldip S. Dosanjh, Mario L. Dos Remedios, James E. R. Ellis, Ronald B. Ely, Stella H. Folie, Constantinos Galanopoulos, Yvonne C. J. Grant, Judith J. Gray, Theodore Hadjimarkou, Marlene J. Hamilton, Lawry W. Herron, Michael A. P. Hopmeier, John A. Jerrard, Randall E. Kay, Philip Lee Kar Fai, Michael R. Leir, Michael W. McCandless, Gerassimos S. M. Molfetas, Anthony C. Morgan, Charles A. Murphy, David R. Norman, Margaret T. Okorodudu, Ching-Han Ong, Christopher B. Penman, John D. Plowman, Poh Chu Chai, Robert D. Ribeiro, Sim Mong Soo, Kayode S. Sofola, Paraskevi Soula, Carlton R. Stoiber, Clive S. Townley, Wolfgang F. H. Trautwein, Percy Urday Berenguel, Nkiruka U. Uzodike, Alexandra Vovolini, Bruce L. Welling, Michael T. Womack, Philippos S. Zachariades, Sami U. Zafar. [53]

University Postgraduate Diplomas: International Law 1; Shipping Law 18.

FACULTY OF SCIENCE

Ph.D. *Anatomy and Embryology:* Moudhi N. A. Bou Resli, Elspeth A. Bradley, Sandra B. Colville-Stewart, David H. Jones, Susan M. E. Kennedy, Bradford B. Walters, Billie I. Williams. *Anthropology:* Stephen T. Crump, David H. Harrison, Katherine M. Homewood, Jonathan I. Pollock, Michael Thompson. *Biochemistry:* David I. M. De Pomerai, Kevin Hood, Rosemary Jagus, Donald F. Kennedy, Susan F. Koval, Hillman H. Osborne, Gordon Parry, Ian A. Simpson, Susan J. Smith, Ramsey T. Tetlow. *Botany and Microbiology:* Judith P. Armitage, David A. Coates, Sanaur R. Khan, Raymond B. Pearce, Peter F. Randerson, Rosemary A. Simpson. *Chemistry:* Rosslyn Chidgey,

*Awarded mark of Distinction. ‡Awarded 1974–75, but not included in the Annual Report for that year. ¶2 Candidates awarded marks of Distinction.

Candido Choo Yin, Juliusz Z. Chrzastowski, Anthony J. Curtis, Nasir A. Fazal, Ann Gibney, Sundus E. Hasson, Graham J. Hutchings, Lim Keow Bee, Roger P. Morgan, Margaret N. Mruzek, Brenda Muggleton, Ian G. Neil, Neoh Soon Bin, Eleanor O. Onon, Christopher S. Pote, Franklin D. Rumjanek, Roderick S. Stradling, John F. White, Henry N-C Wong. *School of Environmental Studies:* Bruce P. Christie, §Kathleen Evans, Sivaguru Ganesan. *Geography:* Derek O. Lee, Helen M. Rendell. *Geology:* Riadh H. Al-Dabbagh, Thomas P. Chamney, Salah S. Doghaim, Ian R. Hoskin, Michael J. O'Shea, Roger J. Price. *History and Philosophy of Science:* Robin Keen. *Human Genetics and Biometry:* Susan E. Gardiner, Elizabeth A. Sturt, Atam Vetta. *Pharmacology:* Maral Dabbaghian, Ian Marshall. *Physics:* Robert A. Basto, John C. Blades, Philip A. Charles, Clive Comber, Ian J. D. Craig, Jon Darius, Malcolm S. Groom, Helmut H. K. Güttler, Frederick J. Hawkins, Timothy L. Killeen, Keith O. Mason, Pangratios Papacosta, James M. Penman, Simon D. Pepper, Christopher G. Rapley, Michael G. Salem. *Physiology:* John D. Bousfield, Lucy M. Brown, Frank G. Harrison, John C. Smaje, Judy R. Trott. *Psychology:* Patrick A. Berg, Margaret H. Dewart, James A. Hampton, Joyce D. McGuinness, Linda A. Murray, Syed M. M. Murshed, David A. Oakley, Francis D. Rose. *Statistics and Computer Science:* Mohammad B. Bazargan, José M. Bernardo Herranz, Thomas Fearn. *Zoology and Comparative Anatomy:* Geoffrey Brown, Graham H. Evans, Pramarn Phromsuthirak, Peter L. Stern. [101]

M.Phil. *Anthropology:* Thérèse Blanchet-Cohen. *School of Environmental Studies:* George A. Goulty, Michael R. Miller. *Geography:* Christine Carr. *Geology:* Richard N. Reed. *Psychology:* Jean C. Dalais, Glenn C. Francis. [7]

M.Sc. *Architecture:* William E. Bott, Nicholas M. Brill, Carolyn A. Hall, Robert D. Hodgkinson, Fook W. Lam, Eduardo Miralles Camacho, Steven R. Padget, Theologos Papadopoulos, David K. Seddon, Robert C. Sprunt, Doris P. White. *Biochemical Engineering:* Rohit D. Amin, Fernando Garcia-Hernandez, Maria D. Loizidou. *Biochemistry:* Tazoacha M. Asonganyi, David J. Bartlett, John W. Dyer, Andrew G. Oliver, Sundaram Sivasubramanian, Karuna D. Somasundaram. *Computer Science:* Carmen J. D. Avecilla, Daryoush Javan-Tabrizi, Swee C. Lim, Simin Toobian. *Conservation:* Margaret A. Anizoba, James K. Buchanan, John W. Davidson, Veronica M. Gilmore, Valerie J. Greenall, Ian R. Hepburn, Judith L. Kloeden, Thomas C. Meredith, *Rosemarie H. Simpson, Anne D. Taylor, Robert G. Wells. *Educational Psychology:* Jean M. Anderson, Michael J. Aris, Arthur Blair, Linda M. Cresswell, Caroline J. Davies, Anthony C. Feiler, Carmel Jennings, Elizabeth A. Lyon, Christopher M. P. Stevens, Alec Webster. *History and Philosophy of Science:* Nigel J. Arundale, Nicholas O. Minns, Paul J. Weindling. *Hydrogeology:* John O. Adesuyi, Izzeldin M. Ahmed, Anthony I. Akpoborie, Fawzia M. A. Al-Ruwaih, George Asomaning, Wonder M. Banda, Tadesse Belachew, Harald L. Gorhan, John F. T. Houston, Edward H. Morel, John Ridings, Peter C. Sims. *Marine Earth Science:* Brynley J. Austin, Colin F. Beavington, Andrew L. Fawthrop, Donald A. Goddard, Brian K. Penny, Nigel J. P. Smith.

*Awarded a mark of Distinction. §Also working in another Department.

Micropalaeontology: Simintaj Amirnazmi Afshar, Mark Capsey, Sarah J. Chance, Steven C. Davies, Vivienne A. Edwards, David J. Horne, Patricia A. Mountford. *Physiology:* Christopher A. Barley, Arthur N. Casson, Laurence C. Fritz, Martin J. N. McDonagh, Joel H. Okullo, Job M. Walumbe, Brian A. Wind. *Statistics:* Gillian M. Adams, Vanessa Chestney, Stewart M. Coutts, Maria Lyssimachou, Alan P. Plumb, David J. Spiegelhalter, Arthur D. Tsakok. *Vertebrate Palaeontology:* Michael E. Howgate. [88]

University Postgraduate Diplomas; Material Culture 2¶; Social Anthropology 5‖.

FACULTY OF ENGINEERING

Ph.D. *Chemical Engineering:* Lucia Y. Cheung, Hector Ciavaldini; Slobodan Jančić, Peter A. Munro, Simon P. Waldram, Michael J. L. Whiting, John R. Williams. *Civil and Municipal Engineering:* Qusai A. L. J. Al-Ani, Ali Assadi, Timothy P. Hutchinson, Lami A. M. Ibrahim, John J. Roberts, John V. Russell, Mufid A. Samarai, Herbert H. Spencer. *Electronic and Electrical Engineering.* Demosthenes Asimacopoulos, Orlando R. Baiocchi, Peter A. Blakey, Catherine H. Bulmer, Fatih Canatan, Ali R. Darbandi-Tehrani, Olivério D. Dias Soares, Michael R. Forshaw, Anis Husain, Sunil R. Judah, Richard C. Nicol, Emmanuel Papadofrangakis, Shahrokh Sheybani, Said Y. Stephan, Stephen Wright. *Mechanical Engineering:* Adil R. Elias, David Ingram. [32]

M.Phil. *Chemical Engineering:* Raymond Cazes. *Electronic and Electrical Engineering:* Iris S. Baiocchi, Harris Makridis. *Mechanical Engineering:* Charles V. Betts, Fareydoon Dizaji. [5]

M.Sc. *Biochemical Engineering:* Kodzo Gbewonyo, Alberto J. Limon-Lason y Roldan, Catherine Smith, Rochelle A. Wirsig. *Microwaves and Modern Optics:* Meera Balan, Alvaro D. De Oliveira, Roger D. Dewell, John E. Evans, Siamak Forouhar, Mehdi Hamidi, Phivos Malamis, Ranjit S. Manku, Dariush Mirshekar Syahkal, Khalid F. Mirza, Edward T. Roberts, *Kirpal S. Tahim, Demetra Theocharides, Yiannakis Theocharides, U Htoo, Constantine Vassiliades, Sein Waing. *Ocean Engineering* (*Mechanical Engineering*)*:* William L. C. Batchelor, Rui M. M. Carneiro De Barros, Christopher G. G. Cockbain, Constantine Dritsas, Richard Garside, Murat Gigin, Geoffrey J. Harrison, Emmanuel Mavrommatakis, James R. Petrie, Keith G. Whiskin. *Ocean Engineering* (*Naval Architecture*)*:* Mansur Ahmad, Maqbool Ahmad, Majid A. Al-Sani, Joseph O. Badeji, Moazzam Baig, Ravinder K. Bhatia, John Dale, Guy E. Gibbons, *Jonathan Goodwin, Martyn G. Hart, *Robert D. Mulligan, Nilendra Nigam, Andrew C. North, Paw Tun, Lester F. Pearson, Nicolaos Skiadaresis, *William R. Starchuk, *Tam Kwong Yuen, Thein Tun, Kuldeep K. Varma, Rakesh B. Verma. *Surveying:* *Laurence Cheney, Roy S. Sharp. [54]

FACULTY OF MEDICINE

Ph.D. *Zoology and Comparative Anatomy:* Richard A. Knight, Stephen H. Leech, Sue E. Martin. [3]

*Awarded a mark of Distinction. ¶1 Candidate awarded a mark of Credit. ‖3 Candidates awarded marks of Credit.

COLLEGE DIPLOMA AND CERTIFICATE AWARDS

1 OCTOBER 1975—30 SEPTEMBER 1976

FACULTY OF ARTS

Certificate in Archive Administration: Azizah Kasah; Mukwange Patrick Kadede Nhandu; Atique Zafar Sheikh; Immaculate Nguku Simon Wanyaga. [4]

Diploma in Film Studies: Pamela Cook; Paul William Marris; Marcus Simon Rees Roberts. [3]

Diploma in Library and Information Studies: Patricia Olive Margaret Adams; Denise Sussan Annett; Susan Mary Bates; Joan Elise Bayley; Christine Burden; Rodney Neill Burke; Heather Mary Cox; Michael Francis Daly; Jane Elizabeth Douglas; Roderick Gavin Sholto Douglas; Haigoush Ebrahimi; Jayne Evans; Patrick Joseph Fell; Hilary Mercy Frazer; Pamela Gaffney; Linda Eleanor Gilbert; Barbara Ashley Brendon Gubbin; Peter John Harbord; *Frances Marjorie Harris; Roger Davington Hawkes; *Alison Margaret Reid Hay; Pauline Heddle; Peter Michel Heinecke; Jane Elizabeth Hutchings; Margaret Ceridwen Jones; Nicholas John Gordon Lack; Brian Eugene Lantz; Alice Lee; Mary Rosalie Leong; Marion Ann Macleod; Gillian Claire Makin; Christopher William Marks; Patricia Moody; Stephanie Lillian Elaine Morton; Pauline Mary Moy; Phyllis Wambui Ngoima; Elizabeth Anne Nicholson; Rosemary Pauline Pelham; Hazel Mignonne Roberts; Paul Everard Scarsbrook; Stephen Charles Taylor; Anastasia Tsoutsou; Christopher Michael Turner; *Susan Elizabeth Usher; Catherine Mary Walker; Mary Rebecca Wallace; Barbara Helen Rosemary Warner; Maxine Roberta Watt; Susi Woodhouse; Frances Sarah Woodroffe. [50]

Certificate of Proficiency in Phonetics: Aicha Aouad; Corinne Bastian; Anne Dominique Batt; Mohamed Benrabah; Anna Livia Julian Brawn; Peter Buckley; Yvonne Hazel Christopher; Jean Margaret Coles; Sarah Elizabeth Dearsley; Vessela Radeva Dimitrova; Mary Anne Dray; Clive Anthony Dwyer; Peter Funken; Lesley Ann Goodere; John David Harper; Yvonne Lilian Florence Hawkins; Valeriano Hornero Moreno; Lisa Kathleen Huffman; Sigrid Elise Jahr; Amanda Maureen Johnson; Susan Kelly; Christopher Michael Knowles; Andrew Nicholas Leak; Pauline Mary Le Cras; John Drewett Martell; Mohammad Memaran; Yvonne Renée Andrée Millot; Sarah Nichols; Kikuko Okada; Carole Owen; Martin John Packer; Jennifer de Courcy Page; Penelope Jane Parkinson; Stephanie Ruth Phillips; Sandra Jean Pleasants; Anne Puddicombe; Roya Rahmati; Pamela Royston; Joanna Mary Sidebottom; Graham Lawrence Steinsberg; Edelweiss Teodori; Dragoslava Trandafilovic; Jane Rachel Turner; Ruth Suzanne Vinegrad; David John Walker; Vivienne Grainger Ward; Russell Martin Wild; Wong Hok Chun; Suzanne Mary Yde-Poulsen. [49]

FACULTY OF SCIENCE

Diploma in Conservation: Margaret Azuka Anizoba; James Keith Buchanan;

*Awarded with Distinction.

John Warner Davidson; Veronica Mary Gilmore; Valerie Joy Greenall; †Ian Roger Hepburn; †Judith Lorraine Kloeden; †Thomas Charles Meredith; *Rosemarie Helen Simpson; Anne Dorothy Taylor; Robert Gibson Wells. [11]

Diploma in Hydrogeology: John Omoniyi Adesuyi; Izzeldin Mohammed Ahmed; Anthony Irwin Akporborie; Fawzia Mohammad Ahmad Al-Ruwaih; George Asomaning; Wonder Maxwell Banda; Tadesse Belachew; Harald Gorhan; John Francis Thomas Houston; Edward Hugh Morel; John Ridings; Paul Jeremy Shaw; Peter Clive Sims. [13]

Diploma in Micropalaeontology: Simintaj Amirnazmi Afshar; Guity Delkhosh Djahromy; *Paul Gwynfor Edwards; Gillian Barbara Robertson; David Anthony Salmon; Ian Walker. [6]

Diploma in Space Science: David Victor Strange; Patrick Alan Thyer. [2]

Diploma in Statistics: Mohamed Awad Ali; Robin Andrew Oliver; Hilary Ann Pike. [3]

FACULTY OF ENGINEERING

Diploma in Biochemical Engineering: Rohit Dhirajlal Amin; Kodzo Gbewonyo; Maria Demetriou Loizidou; Catherine Smith; Clive Kenneth Wilkinson; Rochelle Andrea Wirsig. [6]

Diploma in Chemical Engineering: Shahram Berjiss; Robert Alexander Bleeks; Norman Cyprien Clarke; Basil Demetriou; Lim Kuang Sia; Javier De Jesus Mansilla-Peña; Howard Taylor; *Chang Kwo Yoe. [8]

Diploma in Microwave Engineering: Meera Balan; Alvaro Duarte De Oliveira; Roger David Dewell; John Edward Evans; Siamak Forouhar; Seyyed Mehdi Hamidi; Phivos Malumis; Ranjit Singh Manku; Dariush Mirshekar-Syahkal; Khalid Farooq Mirza; Hariharan Ramani; Edward Thridda Roberts; Surendra Pratap Singh; Kirpal Singh Tahim; Demetra Theocharides; Yiannakis Theocharides; George Tragoustis; U Htoo; Constantine Vassiliades; Sein Waing. [20]

Diploma in Ocean Engineering: Mansur Ahmad; Maqbool Ahmad; Majid Ali Al-Sani; Joseph Olukayode Badeji; Moazzam Baig; William Lucas Charles Batchelor; Ravinder Krishan Bhatia; Christopher Gilpin Grieg Cockbain; John Dale; Constantine Dritsas; Richard Garside; †Guy Edward Gibbons; Murat Gigin; *Jonathan Goodwin; Geoffrey John Harrison; †Martyn Graham Hart; Emmanuel Mavrommatakis; Rui Manuel Menezes Carneiro De Barros; *Robert Drennan Mulligan; †Nilendra Nigam; Andrew Colin North; Paw Tun; Lester Franz Pearson; James Richard Petrie; Nicolaos Skiadaresis; *William Robert Starchuk; *Tam Kwong Yuen; Thein Tun; Kuldeep Kumar Varma; Rakesh Bahadur Verma; Keith Graham Whiskin. [31]

Diploma in Photogrammetry: Olusola Atilola; Michael Leslie Dempster; Willibald Patrick Segu; Michael Peter Bruce Grant Wilson; Albert Yeung Kwok Wai. [5]

Diploma in Surveying: Matloob Alam; Achilles Spyridon Gazis; Christopher Richard Little; Stuart John Marshall; *Stephen Mayles; Christopher Michael Mould; David Keith Parker; Graeme Johnstone Paton; Robert Nicholas Rigby; *Timothy Keith Rylance; Helen Myra Walton [11]

*Awarded with Distinction. †Awarded with Merit.

Diploma in Architecture: Jeremy Christopher Peter Amos; Chelvadurai Anjalendran; Andrew Barrett; John Richard Bishop; Alan Douglas Bonner; Christopher Charles William Bracey; Simon Henry Child; Peter Michael Collins; Andrew John Davey; Martin McAra Dickie; Gerard Roger Steven Gally Thomforde; *Ewa Teresa Hawrylowicz; Dean Anthony Hilborne; Harriet Lily Jedwab; Mary Anne Johnson; Nicholas Roy Lester; Michael Edward Lewis; Anne Machin; Robert John Mackrill; Jane Elsa Michaels; Ole Martin Raugland; Hugh Martin Rees; *Ren Wei Ma; David Karl Seddon; Paul Graham Sharrock; Geoffrey John Vale; Peter William Wesolowski; Jonathan Wild; John Albert Wysocki. [29]

Certificate in Development Planning: Bashir Abdurrahman Abdulhamid; Fulin Bolen; Manop Bongsadat; Mahmoud Salah El-Deen El Daoushy; Milutin Glavicki; Miguel Messmacher; Mohamed Mohamed Abd Elmonim Elgamil; Hanem Abdel Aziz Negm Negm; Mireya Rosales; Ghani Salleh; Mohamed Ihsan Shiri; Amin Hassan Amin Waly. [12]

Diploma in Development Planning: Carlos Alberto Abaleron; Abd Alla Abdel Galil Abd Alla; Joy Beverley Alexander; Abdelhamied Mohamed Ali; Ronald Dunstan Amoroso; Ja'afaru Barde Ango; Mohammed Saleem Bukhari; German Gilberto Diaz Feliu; Ali Edjlali; El Naem Mohamed El-Amin; Mohamed Ahmed Mohamed Awad Elkarim; Ashraf Gamal El Din Mohamed El Masry; Jimmy Bomanshaw Ghaswala; Hassan Idris Goda; Amalia Guerrero De Carletti; Hanimah Hamidon; Christopher John Hudson; Sajjad Hussain; Mohammad Ishaque; Majid Jahanshahi; Soejoto Koesoemoprawiro; Dimon Liu; Elamin Elsayed Mohamed; Nariman Navab; Reinhold Raeck; Jesus Rivero Marti; Sulieman Atta Saad; Thomas Alberto Schreiner; Bhrigu Nath Singh; Semmanachelvi Sivanesan; Roger Frank Tuffs. [31]

Certificate in Urban Development Planning: Mohamed Ahmed Abdel Aal; Bakri Ahmed Abdelrahim; Mirvet Abbass Morcy Allam; Driss Benslimane; Nancy Das Gracas Cardia; Kenneth Arnold Finlayson; Faten Alfons Ishak; Carlton Gladstone Johnson; Seraphim Miniandi Ruiga Kaburu; Wachira Kahoro; Randhir Singh Malik; Pablo Francisco Mardones-Krüger; Rene Martinez; Abdul Rashid Mohd Yusoff; Dorria Mostafa; Utkatu Naiker; Fatemeh Saghafy; Gita Chandulal Shah; Abul Fazal Mohammad Sharfuddin; Soewoko. [20]

***Awarded with Distinction.**

SCHOLARSHIPS, STUDENTSHIPS, AND PRIZES
COLLEGE AND UNIVERSITY AWARDS

COLLEGE AWARDS

Charlotte Ashby Prize (*Laws*)—P. B. Mathews.
Sarah M. Baker Memorial Prize (*Botany*)—D. P. Josey.
Barlow Prize (*Electronic and Electrical Engineering*)—E. Papadofrangakis.
Herbert Batsford Prize (*Architecture*)—W. Wang.
Thomas Witherden Batt Scholarships (*Science*)—C. J. Duffin, T. J. Grey, D. J. Jutson, J. R. Marshall, J. J. Settle.
Leonard Bayliss Memorial Prize (*Physiology*)—M. R. Jarmulowicz.
Ada Heather Bigg Prize (*Economics*)—J. M. Silvertown.
Bonney Prize (*Geology*)—A. Okay.
Boise Scholarships (*Fine Art*)—P. McCormack, Sally Musgrove, Iny Naomi, I. Broadley, D. Watmough, S. Webster, Barbara Kassel, R. Wilson, D. Mortimer-Jones, Jocelyn Tooke, G. Alexander.
R. E. Bradbury Memorial Prize (*Anthropology*)—Adele K. Anthony.
British Association Exhibitions (*Science*)—S. W. Baker, M. Hayward.
Brodrick-Parry Prize (*Geography*)—Diane Lewis.
Rodney Burn Prize (*Fine Art*)—T. Lomax.
Chadwick Medal and Prize (*Civil Engineering*)—I. M. Sowden.
Churchill-Jenkinson Prize (*Archive Studies*)—G. E. Yeo.
Clinton Prize (*Electronic and Electrical Engineering*)—*S. Sai Man Lee.*
Court Studentship in Mathematics—P. E. Berry.
Cowley Prizes (*Library and Information Studies*)—S. G. Haw, G. H. Whitaker.
Dawes Hicks Postgraduate Scholarship in Philosophy—Anita Avramides.
Donaldson Medal (*Architecture*)—R. A. Jones.
Early English Text Society's Prize—Valerie Traylen.
Environmental Design Prize—T. Bridge.
Esso Chemical Travelling Scholarship (*Chemical Engineering*)—G. S. Raouzeos.
Sir Banister Fletcher Prize and Medal (*Architecture*)—Ewa. T. Hawrylowicz.
Flinders Petrie Scholarships in Egyptian Archaeology—D. G. Jeffreys, Anne Millard.
Daryll Forde Award (*Anthropology*)—P. W. Lucas.
Carey Foster Research Prizes (*Physics*)—A. J. Willis, H. H. K. Güttler.
Stephen Glanville Memorial Scholarships (*Egyptology*)—C. Hope, P. V. Johnson.
Edith Goodyear Prize (*Geology*)—S. R. J. Williams.
Eva Grunwald Memorial Prize (*French*)—C. M. Knowles.
Paul Haas Studentship ((*Biochemistry*)—M. Rahman.
Violet Hall Prize (*French*)—Ruth Pelter.
Hart Prizes (*Photogrammetry and Surveying*)—M. L. Dempster, S. Mayles.
Archibald P. Head Memorial Medal and Prize (*Mechanical Engineering*)—Chan Seng Onn.
Heimann Medal (*German*)—Rosa G. Klarner.
Henriques Scholarship (*Fine Art*)—Rosemary Burton.
Elsie Hitchcock Prize (*English*)—Denise Thorn.

Hollier Scholarships in Greek—Mary Manziou, Ellen M. Dermit.
Hollier Scholarship in Hebrew—S. A. Josovic.
Hotine Exhibition (*Photogrammetry and Surveying*)—S. Mayres.
R. B. Hounsfield Prize in Town Planning and Civic Engineering—P. E. Langley.
Huntington Research Centre Prize (*Histology Part I—Medical Sciences*)—R. I. Luder.
Hurst Prize in English Law—M. C. Kay.
Institution of Civil Engineers Prize—Lim Hung Tjung.
Institution of Electrical Engineers Prize—R. M. Tester.
Institution of Mechanical Engineers Prize—R. J. Tyrell.
Jackson Lewis Scholarships—Ann Scallan, R. J. A. Weis, Pamela Cook, Judith L. Klavans-Rekosh, Jennifer R. Jessop.
Sir Hilary Jenkinson Scholarships in Archive Studies—E. M. Turner, A. G. Tough.
Jolowicz Prize (*Roman Law*)—Catherine M. Newman.
Daniel Jones Memorial Prize (*Phonetics*)—Sophia A. Adjaye.
Ker Memorial Prize (*English*)—R. J. A. Weis.
Kitson Prize (*Chemical Engineering*)—P. Papaloizou, P. D. Martin. Prize equally divided.
Dr R. Kohn Prize (*Physiology Part I—Medical Sciences*)—Alison J. Harries.
Library and Information Studies Exhibitions—Elizabeth Karew, Lilian A. Dale.
Sir John MacAlister Medal (*Library and Information Studies*)—Susan E. Usher.
Betty Malcolm Scholarship (*Fine Art*)—M. D. Anderson.
Malden Scholarship (*Greek*)—G. C. Woodbridge.
John Marshall Prize and Medal (*Philology*)—R. T. D. Cann.
Maxwell Law Prize—Jacqueline A. Turner.
Sir William Meyer Prize (*Geography*)—Catherine A. Middleton.
Sir William Meyer Prize (*History*)—Patricia Connor, Katherine A. Dornell, Juliet Gardiner (prize equally divided).
Sir William Meyer Travelling Studentships (*History*)—S. J. Horrox, J. C. Kendle, C. G. Place, N. J. Innocent, T. C. Izzard, Carola E. A. Savill, J. Warner, Susan L. Wilkinson.
Sir William Meyer Essay Prize (*Geography*)—C. J. Thompson.
Merck Sharp and Dohme Ltd Prize (*Biochemistry Part I—Medical Sciences*)—Ann M. Telesz.
Merck Sharp and Dohme Ltd Prize (*Genetics Part II—Medical Sciences*)—T. J. Hurt.
John Stuart Mill Scholarship in Philosophy of Mind and Logic—Anita Avramides.
Momber Scholarship in Physics—R. J. Blissett.
Rosa Morison Postgraduate Scholarships in Arts—Joanna Volley, J. D. Robson.
Morley Medal (*Modern English Literature*)—S. D. Bamlett.
Morris Prize (*Geology*)—Sarah J. Glendining.
Melvill Nettleship Prize for Figure Composition (*Fine Art*)—Philippa Mitchell.
Oliver Scholarship in Botany—J. Dodds.
Catherine Maude Pearce Scholarship for Senior Women Students—Jennifer E. Sinclair.
Platt Prizes (*Greek*)—P. L. Hodges, Moira J. Halliday.
Harry Poole Prize (*Chemistry*)—Marion A. Sumner.
Quain Studentship in Biology—Judith P. Armitage.
Quain English Essay Prize—Stephanie M. I. Stuart.

Ramsay Memorial Medal (*Chemistry*)—D. L. Andrews.
Mary Rischgitz Prize (*Fine Art*)—P. T. McCormack.
Graham Robertson Travelling Scholarships (*Fine Art*)—D. Viner, G. Alexander.
Robert Ross Scholarship in Fine Art—A. Smith.
Hester Rothschild Scholarship in Hebrew—S. A. Josovic.
L. M. Rothschild Scholarship in French—J. M. Lewis.
Slade Prize—Clare E. Froy.
Slade Scholarship—Jacqueline Rochester.
Hugh Smith Memorial Prize (*English*)—Gwyneth Roberts.
Smith Kline and French Laboratories Ltd Prize (*Medical Sciences*)—Alison J. Harries.
Stanbury Scholarship in Stage Design—M. D. Anderson.
Steer Prize (*Fine Art*)—H. L. Brown.
Steer Medal (*Fine Art*)—J. P. Sullivan.
Steer Bursary (*Fine Art*)—P. Butler.
Stevenson Prize (*Applied Mathematics*)—M. D. O'Connell, R. B. Patel, prize equally divided.
Sir Andrew Taylor Prize in Architecture—R. W. Ma.
Taylor Woodrow Travelling Scholarship (*Civil Engineering*)—P. Georgiou.
Henry Tonks Prize (*Fine Art*)—H. L. Brown.
Troughton Scholarship —P. T. Turpin.
Tuffnell Scholarships (*Chemistry*)—R. Gosling, I. P. Rothwell.
A. J. V. Underwood Exhibition (*Chemical Engineering*)—B. Vakilzadleh.
L. F. Vernon-Harcourt Prize (*Civil Engineering*)—P. Georgiou.
Ellen Watson Memorial Scholarship in Applied Mathematics—S. J. Avis.
Webber Prize (*Laws*)—Catherine M. Newman.
Dr T. D. Whittet Prize (*Pharmacology Part II—Medical Sciences*)—R. P. Rampling.
Audrey Wykeham Prize (*Fine Art*)—P. T. Turpin.

FACULTY MEDALS AND PRIZES

Arts: Rosa Morison Memorial Medal and Prize—Diane E. Sherlock.
Laws: Andrews Medal and Prize—Jacqueline A. Turner.
Science: Medal and Prize—S. J. Avis.
Engineering: Goldsmid Medal and Prize—Chan Seng Onn.
Medical Sciences: Medal and Prize—Joanna M. Harries.
Environmental Studies: Medal and Prize—T. Bridge.

SESSIONAL PRIZES

Anthropology: Rosa Morison Prize—Clare E. Swindall. *M. G. Smith Prize*—S. R. Priddy. *Kaberry Prize*—Helen M. Walker.
English: Campbell Clarke Scholarships—(1) Hermione L. Whitman, (2) Valerie A. Neale, Oonagh G.M.G.A. Sayce, prize equally divided. *West Scholarship*—Stephanie M. I. Stuart, R. J. A. Weis, prize equally divided.
Fine Art: Coldstream Prize—Clio A. Heath. *Monnington Prize*—M. R. Eden.
French: Rosa Morison Prizes—(1) Sarah E. Dearsley, (2) Catherine J. Green, (3) Angeliki Olympiou.
Geography: College Prize—A. V. Lomas. *Maconochie Prize*—Gillian A. Russell. *1903 Prize*—Sarah Bachanan. *H. C. Darby Prize*—Diana M. Liverman.

German: Robertson Prize—Mary Smyth. *Willoughby Prize*—A. J. Mussell.
Greek: Long Prize—C. J. Buss.
Hebrew: Jews Commemoration Scholarship—H. Rossenwasser.
History: Dolley Prize—Deborah Love.
Pollard Prize—M. C. B. Burleigh, J. Warner, prize equally divided.
West Prize—C. G. Place, G. C. Thursby-Pelham, prize equally divided.
Alfred Cobban Prize—P. D. Marston, P. N. Scheerin, prize equally divided.
History of Art: Gombrich Prize—Philippa Mason. *Wittkower Prize*—P. G. Smith.
Italian: Sir Anthony Panizzi Prize—C. M. Knowles, Penelope J. Parkinson, Aline F. Merriam, prize equally divided.
Latin: Key Prize—Lesley A. Jones.
Philosophy: Dawes Hicks Scholarships—(1) K. W. G. MacKenzie, (2) T. Yagisawa.
Phonetics: Harold E. Palmer Prize—Diane E. Sharlock.
Political Economy: Hume-Lloyd Scholarships—(1) P. S. Capella, (2) B. Bray, (3) Rosalind M. Altmann.
Scandinavian Studies: Rosa Morison Prize—C. G. A. Sampson, M. P. Gay, prize equally divided. *Crabtree Prize*—Karen L. Nuttgens.
Spanish: Alcala Galiano Prize—Caroline S. Sielle.
Laws: Andrews Prizes—(1) M. C. Kay, (2) M. W. Cuthbert, (3) Judith A. Nicholson, (4) P. B. Mathews, (5) D. G. Lambie.
Architecture: Bartlett Prizes—(1) Maria Vassiliadou, (2) Alexandra E. Freemantle, (3) Sarah J. Murray-Smith.
Astronomy: Huggins Prize—A. Wilson
Chemistry: C. K. Ingold Prizes—(1) M. R. Draper, (2) Y. S. P. Cheng, (3) N. G. Angold.
Geology: Chubb Prize—Sarah Shearme, C. P. North, prize equally divided. *Hollingworth Prize*—R. V. Tyson.
Mathematics: Filon Prize—M. Allen, Susan J. Dilnot, prize equally divided. *Hill Prize*—Valerie Bacon, P. K. Clark, prize equally divided. *Jeffery Prize*—M. Allen, Susan J. Dilnot, prize equally divided.
Pharmacology: H. O. Schild Prize—A. P. Larder.
Physics: William Bragg Prize—Anne E. Sloane, R. W. Gent, prize equally divided. *Oliver Lodge Prize*—R. P. Harkness. *Wood Prize*—S. Monaghan, A. R. Weidberg, prize equally divided.
Physiology: Foster Prize—V. G. Patel. *Sanderson Prize*—Alyson A. Bowhey.
Psychology: McDougall Prize—Helena Medlik, Vanessa M. Linney, prize equally divided. *Spearman Prize*—P. R. Harris. *Burt Prize*—A. Maden, R. J. West, prize equally divided.
Statistics: Egon Pearson Prize—D. E. Clarke, Carol A. Knight, prize equally divided. *Karl Pearson Prize*—L. C. Lam.
Chemical Engineering: Goldsmid Prizes—(1) M. A. Khakoo, (2) M. O. Stevens.
Civil and Municipal Engineering: Goldsmid Prizes—(1) Wee Soon Eng, (2) Gan Boon Khuay, (3) Leung Ming Biu.
Electronic and Electrical Engineering: Goldsmid Prizes—(1) D. J. Price, (2) M. W. H. Shrourou, (3) I. R. Smith.
Mechanical Engineering: Goldsmid Prizes—(1) C. B. Freeman, (2) I. H. Wakeling.
Medical Courses, Part I Examination: I.C.I. Prize in Anatomy—N. W. Wilson. *Drummond Prize in Biochemistry*—Alison J. Harries. *I.C.I. Prize in Physiology*—Amanda H. Goodman. *Glaxo Prize for Best Aggregate Performance*—N. W. Wilson.

Medical Courses, Part II Examination: Drummond Prize in Biochemistry—J.I. Solomon. *Cluff Prize in Physiology*—P. J. Luthert. *Wellcome Prize in Human Biology*—N. Bradey. *Cuxson Gerrard Prize in Pharmacology*—Susannah V. Howard. *Elga Prize in General Pathology*—Susannah V. Howard. *Suckling Prize in Neurosciences and Behavioural Sciences*—Jillian Evenson. *Wyeth Prize for Best Aggregate Performance*—Susannah V. Howard.

Dental Courses, 2nd Examination in Dental Surgery: Anatomy Prize—A. J. Highfield, Jenifer S. Kershaw, prize equally divided. *Physiology Prize*—Azmina Gulamhusein, C. F. Ringrose, prize equally divided.

UNIVERSITY AWARDS

UNIVERSITY POSTGRADUATE (FINALS) STUDENTSHIPS

Anthropology—Ayse N. Sirman. *Chemistry*—Z. Kisiel.

UNIVERSITY POSTGRADUATE STUDENTSHIPS

Anthropology: M. C. Donmall. *Botany and Microbiology*: Cheryl E. J. Wallis (3rd year), J. H. Dodds. *Civil Engineering:* L. C. F. Lam Tin Cheung (3rd year). *Electrical Engineering:* V. Goetcherian. *French:* Frances A. Penketh (2nd year). *Geography:* T. Dormer. *German:* Lynda McAllister. *History:* Gillian C. Wigglesworth (3rd year). *Laws:* M. D. Kretzmer (Edmund Davis Scholarship). *Old Icelandic:* Elizabeth J. Whitelaw (2nd year). *Philosophy:* Antonia Phillips (2nd year).

APPENDIX XII

BENEFACTIONS, DONATIONS, RESEARCH GRANTS AND CONTRACTS

The College Committee makes grateful acknowledgment of the following:

AGRICULTURAL RESEARCH COUNCIL

£9,917 and £3,921 for research in the Department of Botany and Microbiology on the resistance and susceptibility of wheat to rust fungi.

ANONYMOUS DONOR

£450,000 for the development of new student accommodation adjoining Ifor Evans Hall in the student residence complex at Whitcher Place, Camden Town.

ANONYMOUS DONORS

Gifts of £5,000 and £150 to the Department of History in 1974 for the provision of travel grants for students of Ancient History.

ASTHMA RESEARCH COUNCIL

£4,460 for the Department of Pharmacology for the measurement of cell-bound antibodies in asthma and allergy.

BANK OF ENGLAND PRINTING WORKS

£10,964 for the Department of Psychology for a follow-up study of banknote project.

MISS H. A. D. BARLOW (THE LATE)

A bequest of £2,031.16 to the College Library.

PROFESSOR N. A. BARNICOT (THE LATE)

A gift of books, journals, and research materials of the late Professor N. A. Barnicot, formerly Professor of Physical Anthropology and Fellow of the College.

THE BRITISH ACADEMY

(1) £9,925 and £5,303.80 for work in the Department of Greek on unpublished oxyrhynchus papyri.

(2) £5,000 for 1975–76 towards the cost of the production of a definitive edition of the works of Jeremy Bentham.

BRITISH COUNCIL

£475 in support of an exchange visit to the Department of Mechanical Engineering.

British Heart Foundation

(1) £1,151 for a study in the Department of Biophysics of calcium and organic anion movements in heart muscle cells.

(2) £1,115 for research in the Department of Biophysics on inotropic mechanisms in the mammalian heart.

(3) £1,920 for the Department of Physiology for studies of excitation-contraction coupling in cardiac muscle.

The British Library

(1) £700 and £84 for the School of Library, Archive and Information Studies for exploratory modelling for the UK Library/Information System.

(2) £20,650 for the Department of Statistics and Computer Science for studies in facsimile techniques for on-line computer networks.

(3) £20,250 for the Department of Statistics and Computer Science for the provision and evaluation of access to MEDLINE on the ARPA Network.

British Petroleum Company Limited

(1) £300 in support of a CASE studentship in the Department of Chemical Engineering.

(2) £5,000 in support of the Micropalaeontology Unit in the Department of Geology.

British Railways Board

£1,250 and £250 for the Department of Electronic and Electrical Engineering for a study of a simplified identity transponder.

British Society for Research on Ageing

£1,435 and £220 for the Department of Anatomy and Embryology in support of experimental gerontology.

Calouste Gulbenkian Foundation

£2,323 for the Department of English Language and Literature in support of a survey of English Usage.

Cancer Research Campaign

(1) £7,184, £995, and £66 for research in the Department of Anatomy and Embryology on the *in vitro* determination and differentiation of SIKR.

(2) £40,572, £3,943, £1,543, and £351 for the Department of Biochemistry for the development of a test system for carcinogens and for research on biosynthesis and induction of cytochrome P450 in rat liver.

(3) £9,964 for research in the Department of Biochemistry on the induction of tumours of the brain by carcinogens.

(4) £4,215, £1,387, and £112 for research in the Department of Botany and Microbiology on nucleic acid metabolism in mitochondria.

(5) £4,641 and £1,133 for research in the Department of Human Genetics and Biometry on mitotic cycle times and cell proliferation.

CENTEC GESELLSCHAFT FÜR CENTRIFUGENTECHNIK MBH

£840 for a study in the Department of Mechanical Engineering of the problems in balancing thin tubular rotors.

CENTRAL ELECTRICITY RESEARCH LABORATORY

£900 for the Department of Electronic and Electrical Engineering in support of a CASE studentship.

CENTRAL WATER PLANNING UNIT

£16,458 for research in the Department of Geology on saline intrusion into aquifers.

CIVIL SERVICE DEPARTMENT

£52,000 for research in the School of Environmental Studies on planning of the provision of telecommunications for Government departments

THE COUNTRYSIDE COMMISSION

£300 for the Department of Botany and Microbiology in support of research on the impact of recreational activities on natural ecosystems.

DE BEERS INDUSTRIAL DIAMOND DIVISION LIMITED

£1,000 for research in the Department of Chemistry on diamonds.

DEPARTMENT OF EDUCATION AND SCIENCE

£1,713 for the School of Environmental Studies in support of a study of the shared use of polytechnic facilities.

DEPARTMENT OF THE ENVIRONMENT

(1) £24,060 for the Department of Civil and Municipal Engineering for a study of the effect of traffic volume and other factors on road user behaviour.

(2) £21,332 for the Department of Civil and Municipal Engineering for research on traffic accidents and traffic volumes.

(3) £20,145 for a study in the Department of Civil and Municipal Engineering of the effect of ageing on driver awareness of traffic hazards.

(4) £15,638 and £389 for the Department of Civil and Municipal Engineering for a study of major accidents in the building and civil engineering industry.

(5) £13,175 for the Department of Civil and Municipal Engineering for a study of the features of road accidents.

(6) £12,690 for the Department of Civil and Municipal Engineering for an analysis of road accident injuries.

(7) £5,580 for the Department of Civil and Municipal Engineering for a study of the physical processes associated with the entrainment and suspension of solids in turbulent velocity fields.

(8) £3,380 and £100 for research in the Department of Electronic and Electrical Engineering on two-frequency radar for vehicle headway measurements.

(9) £16,228, £3,084, and £208.50 for the School of Environmental Studies for a study of employment in the construction industry.

(10) £850 and £255 for the School of Environmental Studies for a study of construction in economic models.

(11) £6,076 for the Department of Geography for the production of a model to predict ice formation on roads.

(12) £624 for the Department of Political Economy for an investigation into the socio-economic viability of rural settlements.

(13) £22,991 for the Department of Statistics and Computer Science for the development of computerised techniques for broad band route selection.

Department of Health and Social Security

(1) £2,840 for the Department of Mechanical Engineering for the development of an above knee prosthesis.

(2) £5,762 for the Department of Mechanical Engineering for the development of a prototype hydraulically-powered arm.

European Space Research Organisation

£4,770 for the Department of Physics and Astronomy in support of collaboration in EXOSAT experiment development programme.

The General Nursing Council for England and Wales

£2,167 for research in the Department of Psychology on the teaching of social skills.

Dr K. K. Gupta

A gift of $2,000 to provide a fund for the establishment of a bursary, to be known as the 'R. C. Vaughan Bursary', in memory of the late Mr R. C. Vaughan, member of staff in the Department of Civil and Municipal Engineering, 1940–52, to enable grants to be made to students in the Department of Civil and Municipal Engineering who are in need of financial assistance to enable them to continue their studies in the Department.

Home Office

£22,000 for research in the Department of Psychology into standardised tests of literacy and numeracy.

Imperial Chemical Industries Limited

(1) £5,414 for research in the Department of Biochemistry on degranulation of endoplasmic reticulum as a short-term carcinogenicity test.

(2) £11,040 for research in the Department of Electronic and Electrical Engineering on optical properties of multilayer molecular films.

(3) £7,746 for the School of Environmental Studies for a study of audio teleconference facilities installed at ICI.

Leukaemia Research Fund

£9,025 and £875 for the Department of Zoology and Comparative Anatomy for a radio-immunoassay for leukaemic antigens in man.

The Leverhulme Trust Fund

(1) £2,249 and £140 for the School of Environmental Studies for an evaluation of complex buildings with special reference to hospitals.

(2) £662 for the School of Environmental Studies for studies on Land Policies for Planning in Britain.

(3) £14,000 and £537 for the Department of History for the preparation of new edition of the Domesday Book.

London Transport

£6,166 for a study in the Department of Psychology of the recruitment and training of underground guards.

Max-Planck Institut Für Ernanrungs Physiologie

$1,000 for research in the Department of Biochemistry on computer simulation of a multi enzyme system.

Medical Council on Alcoholism Limited

£4,489 for a study in the Department of Pharmacology of the role of lithium in experimental alcohol addiction.

Medical Research Council

(1) £11,079 for research in the Department of Anatomy and Embryology on intercellular junctions in nervous tissue and smooth muscle.

(2) £150 for the Department of Anatomy and Embryology for an analysis of sensory signals in CNS.

(3) £106,425 for the Department of Biochemistry for the development of an empirical carcinogen screen based on membrane degranulation.

(4) £5,243 for a study in the Department of Biochemistry of synthesis and regulation of ribosomal RNA in rat liver and a rat hepatoma cell line.

(5) £2,845 for a study in the Department of Biophysics of signal amplification in the outer plexiform layer of the retina and its relation to the b-wave.

(6) £2,712 and £1,382 for research in the Department of Biophysics on light-induced conductive changes of the disc membrane of red outer segments in intact vertebrate retina.

(7) £962 for research in the Department of Biophysics on metabolic control by permeability and by enzyme action.

(8) £130 for research in the Department of Biophysics on mechanisms of synaptic function.

(9) £7,546 for research in the Department of Chemistry on humoral control of compensatory renal hypertrophy in mammals.

(10) £6,300 for the School of Environmental Studies for a study of centenarians in Equador.

(11) £7,294 for the Department of Human Genetics and Biometry for an analysis of human and other genetic data.

(12) £251 for research in the Department of Pharmacology on the role of calcium in the secretion of histamine from mast cells.

(13) £6,320 for research in the Departments of Pharmacology and Anatomy and Embryology on the redistribution of calcium and other elements in cells stimulated to secrete.

(14) £146,931 for research in the Department of Phonetics and Linguistics on the perception and production of speech patterns by normals and the hearing impaired.

(15) £28,250 for research in the Department of Physiology on exchanges of amino acids within the central nervous system.

(16) £24,197 for research in the Department of Physiology on microvascular flow and transport in the submandibular salivary gland.

(17) £9,606 for research in the Department of Physiology on the energetics of muscular contraction.

(18) £500 for research in the Department of Physiology on the relation between mechanical and chemical events in muscular contraction.

(19) £4,447 for research in the Department of Psychology for a longitudinal study of the cognitive, manipulative, and social skills in ape and human infants.

(20) £273,215, £5,503, £228, and £76 for research in the Department of Zoology and Comparative Anatomy on immunology of the nervous system.

(21) £28,816 for the Department of Zoology and Comparative Anatomy for immunodiagnosis of human leukaemia.

(22) £50,885 for research in the Department of Zoology and Comparative Anatomy on the use of model membranes for studying membrane antigens.

(23) Research training support grants totalling £15,225.

MEDICAL RESEARCH COUNCIL (CANADA)

$500 in support of a fellowship in the Department of Pharmacology.

MINISTRY OF DEFENCE

(1) £23,746 for research in the Department of Electronic and Electrical Engineering on integrated optical components for optical fibre data highways.

(2) £13,577 for the Department of Electronic and Electrical Engineering for a study of direct optical modulation for data highway.

(3) £12,285, £8,555, and £3,011 for research in the Department of Electronic and Electrical Engineering on microwave circuit functions using acoustic surface waves.

(4) £6,350 for a study in the Department of Electronic and Electrical Engineering of hybrid modes in lossy coaxial cables.

(5) £4,708 and £1,500 for the Department of Electronic and Electrical Engineering for semi-conductor device computer studies.

(6) £4,052 for research in the Department of Electronic and Electrical Engineering on null steering antennas.

(7) £2,550 for research in the Department of Electronic and Electrical Engineering on stripline band branching filters.

(8) £5,973 for research in the Department of Phonetics and Linguistics on listener identification of languages on the basis of prosodic features.

(9) £5,646 for research in the Department of Phonetics and Linguistics on perception of speech sound differences.

(10) £26,032 for the Department of Statistics and Computer Science for a study of software problems in computer networks.

(11) £15,066 for research in the Department of Statistics and Computer Science on Kalman filter algorithms for association and prediction.

(12) £5,000 for the Department of Statistics and Computer Science for the use of ARPANET services.

Ministry of Overseas Development

(1) £413,350 in support of teaching in the Development Planning Unit of th School of Environmental Studies over the period 1975–80.

(2) £1,350 for the School of Environmental Studies for research on fring service industries in Chandigarh, India.

National Council for Educational Technology

(1) £10,350 for the Department of Electronic and Electrical Engineering Imperial College, and Queen Mary College for a development project o computer-assisted learning in engineering science.

(2) £50,600 for the Department of Physics and Astronomy for a developmen project on computers in the undergraduate science curriculum.

National Fund for Research into Crippling Diseases

(1) £4,869 and £1,717 for research in the Department of Anatomy an Embryology on the immunological basis of response to sensory nerve myelin.

(2) £2,352 for research in the Department of Anatomy and Embryology o allergic neuritis and multiple sclerosis.

(3) £23,908 for a study in the Department of Zoology and Comparativ Anatomy of mechanisms in diseases of nervous system and muscle.

Natural Environment Research Council

(1) £1,895 and £22 for a study in the Department of Geology of oceanograph of selected areas in the Caribbean.

(2) £6,986 for the Department of Mathematics for an investigation of inertia waves and magnetohydrodynamics of the Earth's Core.

(3) £4,796 and £3,804 for the Department of Physics and Astronomy for th study of surface processes and crustal evolution on the terrestrial planets– extension of mapping of Casius Quadrangle project.

(4) Research training support grants totalling £4,425.

Nature Conservancy Council

(1) £2,690 for the Departments of Botany and Microbiology, Geography, an Zoology and Comparative Anatomy for studies in Nature Reserve managemen

(2) £703 for the Departments of Botany and Microbiology, Geography, an Zoology and Comparative Anatomy for a survey of vegetational habitat in Nort West Sutherland.

North Atlantic Treaty Organization

(1) B.Fr. 160,000 for research in the Department of Chemistry on peri-interac tions in naphthalenes.

(2) B.Fr. 120,000 for a study in the Department of Chemistry of anharmonicit in crystals.

NUFFIELD FOUNDATION

£2,670 for the School of Environmental Studies in support of an extension service for the benefit of university schools of architecture, planning and urban administration in developing countries.

OFFICE OF NAVAL RESEARCH, U.S.A.

$50,000 for the Department of Mechanical Engineering in support of a symposium on naval hydrodynamics.

POST OFFICE CONTRACTS DIVISION

(1) £1,000 for the Department of Electronic and Electrical Engineering for a computer evaluation of switching diodes for millimetre wave communication systems.

(2) £67,165 for a study in the School of Environmental Studies of the utility of advanced telecommunications systems.

(3) £5,791 for a study in the School of Environmental Studies of the effectiveness and impact of future systems of person to person telecommunications and a programme of statistical studies of communications patterns.

ROCHE PRODUCTS

£500 in support of research in the Department of Pharmacology.

ROYAL COLLEGE OF PHYSICIANS

£36,753 for the Department of Statistics and Computer Science for the development of mathematical methods as aids to clinical decision making.

THE ROYAL SOCIETY

(1) £19,362 for a Royal Society Henry Head Research Fellowship in the Department of Anatomy and Embryology.

(2) £3,420 for research in the Department of Electronic and Electrical Engineering on harmonic locking of microwave sources with infra-red lasers.

(3) £5,010 for a Royal Society Scientific Information Research Fellowship in the School of Library, Archive and Information Studies.

(4) £12,927 for a Radcliffe Trust Research Award in the Department of Physics and Astronomy.

SAINSBURY-SPILLERS LIMITED

£7,500 for the Department of Physics and Astronomy for an investigation into the automatic candling of eggs.

SCIENCE RESEARCH COUNCIL

(1) £34,264, £1,200, and £800 for a study in the Department of Anatomy and Embryology of the organisation of the visual cortical areas in the rhesus monkey.

(2) £17,153 for research in the Department of Biochemistry on the mechanism of enzyme action.

(3) £570 for a study in the Department of Botany and Microbiology of the function of iron sulphur proteins and manganese in photosynthetic electron transport.

(4) £3,278 for the Department of Chemical Engineering for particle temperature measurements in a fluidised bed combustor.

(5) £18,449 for the Department of Chemistry for laser Raman spectroscopy.

(6) £10,300 for research in the Department of Chemistry on the syntheses of ionophores.

(7) £7,950 for research in the Department of Chemistry on electrogeneration of transient organometallic radicals for ESR spectrometry.

(8) £7,950 for research in the Department of Chemistry on oxidatively induced reactions of bonded organometallic compounds.

(9) £7,900 for the Department of Chemistry for 'other nucleus' NMR studies in inorganic and organic compounds.

(10) £7,881 for research in the Department of Chemistry on the energetics and kinetics of ions.

(11) £7,700 for the Department of Chemistry for kinetic studies on platinum amine complexes.

(12) £3,798 for the Department of Chemistry for mechanistic studies on the enzyme aspartate amino transferase.

(13) £3,201 for a study in the Department of Chemistry on aspartate amino transferase from bacillus stearothermophilus.

(14) £1,995 for research in the Department of Chemistry on solar-cell materials.

(15) £1,000 for research in the Department of Chemistry on polymer encapsulation of crystals.

(16) £29,208 and £1,000 for research in the Department of Civil and Municipal Engineering on three-dimensional characteristics of coherent flow in boundary layer turbulence.

(17) £9,300 and £4,950 for research in the Department of Civil and Municipal Engineering on the filtration of aqueous suspensions through fibrous media.

(18) £21,000 for the Department of Electronic and Electrical Engineering in support of the Microwave Research Unit.

(19) £8,900 for a study in the Department of Electronic and Electrical Engineering of the transient beam-loading effects in colliding beam storage rings.

(20) £6,665 in support of a senior visiting fellowship in the Department of Electronic and Electrical Engineering.

(21) £6,380 for the Department of Electronic and Electrical Engineering for the measurement of multi-path and scintillation fading.

(22) £19,100 for a study in the Department of Mathematics of the mathematical theory of interaction of intense electro-magnetic fields with molecules

(23) £24,800 for research in the Department of Mechanical Engineering on fatigue crack growth in offshore structures.

(24) £405,626 and £40,000 for the Department of Physics and Astronomy for geophysical and astronomical research in Space.

(25) £61,921, £28,504, £12,042, and £3,202 for the Department of Physics and Astronomy for further observations and extension to 2-D operation in the development of UCL image photon counting system.

(26) £55,813 and £2,000 for the Department of Physics and Astronomy for the Bubble Chamber film analysis for 1976–77.

(27) £44,407 in support of a senior fellowship in the Department of Physics and Astronomy.

(28) £38,191 and £11,938 for the Department of Physics and Astronomy for a balloon programme of infra-red astronomy.

(29) £34,037 and £33,825 for the Department of Physics and Astronomy for studies of ultra-violet astronomy.

(30) £23,888 for the Department of Physics and Astronomy for an electrodynamic Explorer Mission study.

(31) £21,860 for the Department of Physics and Astronomy for the construction of a liquid helium coded grating IR spectrometer.

(32) £19,800 for a study in the Department of Physics and Astronomy of inelastic interactions of positrons in gases.

(33) £14,300 for the Department of Physics and Astronomy for the computation of stellar atmosphere models.

(34) £13,222, £4,167 and £1,187 for the Department of Physics and Astronomy for D and E Region aeronomy at Arenosillo.

(35) £12,969 for the Department of Physics and Astronomy for curve crossing spectroscopy.

(36) £9,451 for the Department of Physics and Astronomy for observations and atomic processes for Be- and B-like ions.

(37) £8,977 for research in the Department of Physics and Astronomy on balloon-borne instrumentation for ultra-violet and infra-red astronomy.

(38) £8,220 for a study in the Department of Physics and Astronomy of atmospheric structure and dynamics.

(39) £7,804, £2,904, £472, and £115 for the Department of Physics and Astronomy for infra-red spectroscopy and photometry of Southern planetary nebulae.

(40) £6,976 for the Department of Physics and Astronomy for an interpretation of interstellar absorption line observations.

(41) £6,866 and £756 for the Department of Physics and Astronomy for a tape recorder for balloon programme of infra-red astronomy.

(42) £5,756, £1,248, £1,234, and £778 in support of senior visiting fellowships in the Department of Physics and Astronomy.

(43) £5,510 for research in the Department of Physics and Astronomy on atom-atom scattering and applications to spectral line broadening.

(44) £4,850 and £360 for an investigation in the Department of Physics and Astronomy of optical vehicle classification.

(45) £4,120 for a study in the Department of Physics and Astronomy of high energy hadrons and nuclear physics.

(46) £3,999 for the Department of Physics and Astronomy in support of the Swedish IMS/GEOS Campaign, Spring 1976.

(47) £2,427 and £1,618 for research in the Department of Physics and Astronomy on ground-based infra-red astronomy from Tenerife.

(48) £2,375 for the Department of Physics and Astronomy, under an agreement with Rutherford High Energy Laboratory, for the study of exclusive hadronic processes at SPS energies.

(49) £1,675 for the Department of Physics and Astronomy for the calculation of atomic data required for astrophysics.

(50) £1,286.62 and £645 for the Department of Physics and Astronomy for spectrometry of quasars and related objects.

(51) £1,630 and £457 for the Department of Physics and Astronomy for optical observations of ultra-violet objects.

(52) £320 for the Department of Physics and Astronomy for spectroscopy of Seyfert Galaxies.

(53) £18,260 and £2,903 for the Department of Statistics and Computer Science for the provision of advisory and documentation services to university users of the ARPA network.

(54) £17,726 for research in the Department of Statistics and Computer Science on aids to proving properties of programs.

(55) £11,090 and £2,063 for the Department of Statistics and Computer Science for an investigation of software and operational requirements for computer network.

(56) Research training support grants totalling £38,625.

Seldown Electronics Limited

£300 for a study in the Department of Electronic and Electrical Engineering of incapsulating compounds and construction of aerial units.

Shell International Petroleum Company Limited

£7,500 in support of the Micropalaeontology Unit in the Department of Geology.

Smith Kline and French Laboratories

A grant of $1,000 for the institution of a Smith Kline and French Laboratories Lectureship in Allied Health Sciences to enable research scientists of renown to visit departments in the Faculty of Medical Sciences to lecture and exchange ideas.

Social Science Research Council

(1) £2,059 for the Department of Anthropology for a study of power and ideology in North Lebanon.

(2) £1,648 for the Department of Anthropology for a study of the social structure and agricultural productivity in Negri Sembilan, Malaysia.

(3) £605 for a study in the Department of Anthropology of the effect of social monitoring on the elasticity of consumption with respect to change in income.

(4) £12,475 for a study in the School of Environmental Studies of the aspects of the growth of owner occupation.

(5) £614 for the School of Environmental Studies for a pilot study of space, time and the disruption of family behaviour patterns in the metropolis.

(6) £347 for a study in the School of Environmental Studies of the effects of interactive video telecommunications upon non-verbal processes.

(7) £1,371 for the Department of Geography for the preparation of a bibliographic guide to the Tithe Surveys of the mid-nineteenth century.

(8) £200 for a study in the Department of Geography of agriculture in France, *c.* 1840.

(9) £34,154 and £569 for the Department of History towards the cost of a definitive edition of the works of Jeremy Bentham.

(10) £928 for a study in the Department of History of Spanish-Dutch conflict and rapprochement, 1621–60.

(11) £498 for a study in the School of Library, Archive and Information Studies of the literature of the British Labour Movement, 1945–70.

(12) £6,523 for a study in the Department of Psychology of the discrimination problems of readers.

(13) £1,255 for a study in the Department of Statistics and Computer Science of the Biometric School and its influences on the social sciences.

(14) Research training support grants totalling £610.

STANFORD RESEARCH INSTITUTE

£6,400 and £2,700 for the School of Environmental Studies for an assessment of the impacts of the use of telecommunications as a substitute for travel.

UNITED KINGDOM ATOMIC ENERGY AUTHORITY

(1) £1,863 for research in the Department of Chemical Engineering on macromolecular separations.

(2) £1,500 and £1,100 for the Department of Physics and Astronomy for studies in atomic collisions.

(3) £434 for research in the Department of Physics and Astronomy on the interactions of heavy ions with thin foils.

(4) £271 for the Department of Physics and Astronomy for a measurement of absolute transition probabilities in excited ions.

(5) £2,350 for the Department of Statistics and Computer Science for ARPA Network software.

(6) £591 for the Department of Statistics and Computer Science as a contribution towards the cost of Data Link from UCL to Norsar, Norway.

UNITED NATIONS ENVIRONMENT PROGRAMME

$13,000 for the Departments of Geography, Botany and Microbiology, and Zoology and Comparative Anatomy, for the production of a component review on ecological change.

UNITED STATES PUBLIC HEALTH SERVICE

(1) $25,769 for a study in the Department of Chemistry of the conformations of cholinergic molecules.

(2) $22,749 for research in the Department of Chemistry on psychoactive substances.

(3) $12,400 for research in the Department of Human Genetics and Biometry on neuromuscular transmission in abnormal development.

(4) $4,821 for a study in the Department of Human Genetics and Biometry of molecular shape and teratogenic specificity.

UNIVERSITY COLLEGE HOSPITAL

£2,000 for the Department of Human Genetics and Biometry to provide technical assistance for work on cytogenetics in the Galton Laboratory.

UNIVERSITY OF CONNECTICUT

$2,000 for research in the Department of Human Genetics and Biometry on molecular shape and teratogenic specificity.

THE WELLCOME FOUNDATION

£1,500 for the Departments of Chemistry and Pharmacology for a feasibility study of the isolation characterisation and specific inhibition of rheumatorial joint collagenase.

THE WELLCOME TRUST

(1) £16,983 for research in the Department of Anatomy and Embryology on hippocampal function.

(2) £6,888 and £357 for research in the Department of Anatomy and Embryology on neuro-anatomy and physiology and the history of the nervous system.

(3) £4,697 for a study in the Department of Anatomy and Embryology of the sympathetic innervation of blood vessels in mammals, including humans.

(4) £3,193 for a study in the Department of Anatomy and Embryology of bone remodelling.

(5) £886 for the Department of Anatomy and Embryology for a study of purinergic nerves.

(6) £794 for a study in the Department of Anatomy and Embryology of post-natal development of the visual system.

(7) £2,585 and £28 for a study in the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology of the Biometric School and its influences on the social sciences.

(8) £1,357 for research in the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology on the impact of Darwinism on the biomedical and social sciences.

(9) £774, £366, and £164 in support of a research training scholarship in the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology.

(10) £2,819 for a study in the Department of Biophysics of time course of action of digitalis glycosides and related compounds.

(11) £1,731 and £121 in support of a fellowship in the Department of Biophysics.

(12) £14,920 and £1,318 for a study in the Department of Chemistry of nerve growth factors and its anti-serum.

(13) £3,216 for a study in the Department of Human Genetics and Biometry of human alcohol dehydrogenase.

(14) £80 for a study in the Department of Pharmacology of problems of central nervous transmitters and autoradiography.

(15) £90,632 and £627 for a study in the Department of Physiology and University College Hospital of developmental neurobiology.

(16) £6,375 and £30 for a study in the Department of Physiology of living and contracting muscle.

(17) £2,983 for a study in the Department of Zoology and Comparative Anatomy of the purification and characterisation of antigen specific lymphocytes.

MR I. S. WHEATLEY

£250 per annum for seven years for the purpose of research into the use of windmills for the generation of electricity. The donation is made in memory of the donor's father, Robert Wheatley, B.Sc., scientist and inventor, 1888–1969.

Miss A. E. M. Wren (the late)

A bequest of £5,000 in memory of her brother, the late Mr T. L. Wren, formerly Reader in Geometry, to be used for purposes of research in the Department of Mathematics and to be known as the 'Wren Bequest'.

Xerox Research (UK) Limited

£3,000 for the Department of Electronic and Electrical Engineering for an investigation of optical wave-guiding materials.

BENEFACTIONS TO THE LIBRARY

Dr M. Braun

A gift of 87 books on a variety of subjects.

Mrs Katherine Jones

A gift of 54 volumes of English and German literature.

Mr A. J. Lane

A gift of 63 items on Celtic studies.

Library of the Swedish Institute

A gift of 300 volumes of Swedish literature.

Lady Robinson

Lady Robinson, the daughter of Sir Victor Horsley, deposited her father's papers in the Library.

Messrs Routledge and Kegan Paul

A gift of over 400 volumes on a variety of subjects.

Society of Authors

Copies of the facsimile edition of the James Joyce *Ulysses* manuscript.

APPENDIX XIII

COLLEGE ACCOUNTS 1975–76

The Balance Sheet and the Income and Expenditure Account for the year will be found on pages 157–9.

BALANCE SHEET

LIABILITIES

The Capital Account reflects a small decrease of £2,095.

ASSETS

For the first time in many years there is no change in the Freehold and Leasehold Land and Buildings.

TRUST FUNDS

The College holds endowments in the form of 218 separate trust funds with a total value of £1,804,748. The funds yielded a total income of £168,000.

INCOME AND EXPENDITURE

The income for the year exceeded expenditure by £118,056. The balance carried forward on the Income and Expenditure Account was £370,525 (£252,469 in 1974–75).

Income exceeded that for 1974–75 by £3,526,375. Grants from the Court of the University increased by £2,341,149. Fees increased by £366,364 and grants for research increased by £762,655.

Expenditure, including allocations to and from Reserves, was £3,451,637 more than in 1974–75. An additional £2,357,029 net was spent on academic departments and services. Maintenance of Premises cost an additional £682,985 net. An additional £194,659 net was spent on administration, and miscellaneous expenditure increased by £216,964 net.

Income and expenditure under the main classifications in 1975–76 as compared with 1974–75 and with the corresponding year of the previous quinquennium, are shown in the following table.

EXPENDITURE	1970–71 £	%	1974–75 £	%	1975–76 £	%
Salaries and Pensions of Teaching Staff	2,638,547	32·7	4,626,380	34·8	5,657,049	33·8
Departmental Expenses, including Library	1,767,862	21·9	3,214,249	24·2	3,777,954	22·6
Research Grants ..	1,527,151	18·9	2,193,199	16·5	2,955,854	17·6
Maintenance of Premises ..	1,202,894	14·9	1,920,756	14·4	2,603,741	15·6
Administration ..	500,622	6·2	951,191	7·1	1,145,850	6·8
Selective Employment Tax	248,995	3·1	—	—	—	—
Other	191,161	2·3	388,882	3·0	605,846	3·6
	£8,077,232	100·0	£13,294,657	100·0	£16,746,294	100·0
INCOME						
Endowments ..	79,493	1·0	159,584	1·2	152,330	0·9
Grants	5,528,564	68·6	10,043,997	75·4	12,385,146	73·4
Donations	129,994	1·6	238,360	1·8	290,978	1·7
Fees	402,888	5·0	486,602	3·6	852,966	5·1
Grants for Research	1,527,151	19·0	2,193,199	16·4	2,955,854	17·5
Research Training Support Grants ..	40,990	0·5	56,090	0·4	58,885	0·4
Selective Employment Tax	248,995	3·1	—	—	—	—
Other	95,888	1·2	160,143	1·2	168,191	1·0
	£8,053,963	100·0	£13,337,975	100·0	£16,864,350	100·0

EXTRA-BUDGETARY ACTIVITIES

The College administers the finances of many research projects supported from outside sources. 520 were being pursued actively at 31 July 1976. Income and expenditure increased from £2,193,199 in 1974–75 to £2,955,854 in 1975–76.

CAPITAL GRANTS

Capital grants made during the year 1975–76 were as follows:	£
Conversion of Bartlett Building for UCRF Decanting: Professional Fees	18,443
Conversion of 3 & 4 Taviton Street for UCRF Decanting: Professional Fees	2,733

	£
Improvements to teaching facilities for Pharmacology:	
Furniture	5,494
Relocation of Anatomy Stores: Building work	5,628
Alterations to teaching space for Geography:	
Building work	2,785
Alterations to New Chemistry Building, ground, first and second floors:	
Building work	7,879
Installation of Alarm Panel in Main Lodge:	
Professional Fees	895
Student Health Centre:	
Professional Fees	16,520
Internal Adaptations—Staff Refectory and Common Room:	
Professional Fees	3,233
Alterations to Basement for department of Statistics and Computer Science:	
Building work	26,500
Provision of Showers, WC's and washing facilities for Anatomy Animal House:	
Building work	5,090
Conversion of Common Room into Tutorial Rooms for Statistics and Computer Science:	
Building work	2,068
Improvements to Maintenance Workshops: Building work	5,000
	£102,268

SCHOLARSHIPS AND PRIZES

Expenditure amounted to £46,162. Awards were made as under:

	Undergraduate	*Postgraduate*
	£	£
From Endowments	9,814	8,305
„ Donations	3,000	16,852
„ General Income	2,906	5,285
	£15,720	£30,442

UNIVERSITY COLLEGE LONDON

BALANCE SHEET 31 JULY 1976

31.7.75		
£		£
16,296,234	CAPITAL ACCOUNT	16,294,139
34,085	REDEMPTION FUND	35,973
6,861	LOAN	4,973
16,337,180		16,335,085
2,320,367	RESERVES AND AMOUNTS SET ASIDE	2,958,644
696,925	EARMARKED FUNDS	758,269
1,119,016	CURRENT LIABILITIES	1,040,506
20,473,488		21,092 504
1,676,458	TRUST FUNDS	1,804,748

NOTE

Freehold and Leasehold Land and Buildings

(*a*) Freehold and Leasehold land and buildings in the accounts do not include fixtures, furniture and equipment. The cost of these assets is written out of the accounts on purchase or on completion of a Project against the corresponding grants or other monies received and are not therefore included in Capital Account.

(*b*) Freehold land and buildings are stated at a valuation made in 1959 on the basis of the then current land values and building costs with subsequent additions at cost or valuation, as estimated by the College authorities on a basis which excludes professional fees.

(*c*) There are commitments for future expenditure on capital projects which amount to £126,000 at 31 July 1976 (*1975 £417,000*).

£22,149,946		£22,897,252

31.7.75		
£		£
16,119,446	FREEHOLD LAND AND BUILDINGS—See Note below	16,119,446
377,772	LEASEHOLD LAND AND BUILDINGS	372,875
16,497,218		16,492,321
79,852	CAPITAL AND OTHER WORKS IN PROGRESS	—
970,648	INVESTMENTS at Lower of Cost and Market Value .. (*Market Value at 31 July 1976: £1,138,701; 31 July 1975: £970,648*)	1,138,701
1,224,443	EXPENDITURE RECOVERABLE FROM GRANTS ..	1,556,176
1,701,327	CURRENT ASSETS	1,905,306
20,473,488		21,092,504
1,676,458	TRUST FUNDS	1,804,748

£22,149,946		£22,897,252

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 JULY 1976

EXPENDITURE

1974–75 £		1975–76 £	£
	ADMINISTRATION		
711,601	Salaries	876,746	
190,175	Advertising, Printing, Stationery, Postage and Telephone	210,680	
49,415	Other Expenses (including Professional Fees)	58,424	
(951,191)			1,145,850
	ACADEMIC DEPARTMENTS		
4,512,230	Salaries of Teaching Staff	5,488,074	
1,463,323	Departmental Wages: Technical Staff	1,643,458	
444,278	Secretarial Staff	556,847	
806,189	Departmental and Laboratory Maintenance	966,141	
2,193,199	Research Expenditure covered by grants on Research Contracts (contra opposite)	2,955,854	
10,644	Other Expenditure	15,123	
(9,429,863)			11,625,497
	ACADEMIC SERVICES		
	Libraries: Salaries	300,271	
428,950	General Expenditure	232,708	
		532,979	
12,880	Central Photographic Service	13,626	
10,584	Audio Visual Aids	17,529	
9,292	Radiation Hazards	12,233	
2,322	Miscellaneous	—	
1,898	Small Group Teaching (Earmarked Funds)	175	
(465,926)			576,542
	MAINTENANCE OF PREMISES		
489,820	Rates	617,053	
42,111	Insurance	38,733	
	Rents and other payments for use of buildings:		
	Halls of Residence	26,640	
75,009	Other Buildings	45,738	
		72,378	
322,436	Heat, Light, Water and Power	363,252	
756,455	Repairs and Maintenance of Buildings including amounts set aside for long-term maintenance	1,296,019	
185,043	Wages of Porters and Attendants	228,465	
22,992	Other Expenses	27,358	
(1,893,866)			2,643,258
	GENERAL EDUCATIONAL		
1,692	Examinations	2,296	
26,815	Scholarships and Prizes	46,162	
4,271	Public Lectures	12,301	
10,000	Staff Attendance at Conferences	11,500	
35,890	Student Vacation Grants	50,508	
10,683	Miscellaneous	10.773	

INCOME

1974–75 £		1975–76 £	£
	ENDOWMENTS		
	Income of Trust Funds appropriated for purposes specified by Trusts against expenditure included opposite		152,330
159,584			
	DONATIONS AND SUBSCRIPTIONS (including Ministry of Overseas Development £77,000):		
	Appropriated for:		
5,233	Libraries	7,781	
7,380	Scholarships and Bursaries	19,852	
175,002	Salaries and Superannuation	188,352	
50,745	Departmental and Laboratory Maintenance	74,993	
(238,360)			290,978
	GRANTS FROM UNIVERSITY COURT		
8,256,900	General	10,404,000	
548,000	Supplementary	69,000	
(8,804,900)			10,473,000
	Earmarked:		
37,465	Minor Building Projects	46,803	
254,663	Academic Salary Revision 1975 Scheme	952,593	
4,340	Clinical Salary Revision 1975 and 1976	7,676	
222,954	Academic London Allowance	49,249	
—	U.S.S. 2% Surcharge	31,876	
—	Fees Waiver	3,640	
489,820	Rates	617,053	
639	Hayter Committee	3,189	
9,861	Parry	5,762	
85,600	Value Added Tax	—	
7,288	University College/Royal Free Medical Project—Administration	7,500	
14,807	M.Sc. Course in Ergonomics	20,466	
92,110	Former Institute of Computer Science	100,497	
1,644	Laser-Raman Spectrometer	1,651	
—	Electron Microprobe	1,126	
17,906	Pension Increase Order	63,065	
(1,239,097)			1,912,146
56,090	**RESEARCH COUNCIL TRAINING SUPPORT GRANTS**		58,885
486,602	**FEES**		852,966
2,193,199	**GRANTS FOR RESEARCH**, including research contracts (contra opposite)		2,955,854
40,534	**CONTRIBUTIONS FOR SERVICES RENDERED**		77,699
20,677	**COLLEGE PROPERTIES**—Rents received		15,196
	OTHER ITEMS		
	Special Funds Appropriation:		
	Earmarked Funds	8,801	
34,688	Other	1,480	
		10,281	
50,199	Interest Receivable	49,542	
14.045	Miscellaneous	15,473	

	STUDENT FACILITIES AND AMENITIES		
82,153	Grant to Students Union	100,614	
4,000	Central Collegiate Building	21,147	
3,702	Salaries: Wardens of Halls of Residence	4,205	
46,322	Student Health Service	49,357	
1,634	Students' Purposes Fund	2,741	
596	Crabb Robinson and Ealing Hall Funds	640	
9,187	Central Admissions Scheme	11,828	
2,822	Miscellaneous	5,919	
5,633	Careers Office	6,128	
8,356	Student Counsellor Service	7,982	
(164,405)			210,561
	MISCELLANEOUS		
114,150	Staff Pensions	168,975	
2,480	Grants from Benevolent Funds	2,676	
1,915	Interest on Overdrafts, etc	3,244	
23,380	Sundries	31,830	
—	College Collection	6,300	
11,999	Refectory: College Subvention 3,401		
27,501	Deficit met by College 50,200	53,601	
(181,425)			266,626
	CAPITAL EXPENDITURE MET FROM INCOME:		
	Minor Building Projects 48,076		
127,347	Other 74,801		122,877
13,303,374			16,724,751
	ALLOCATION TO RESERVES AT 31 JULY 1976		
	Revenue Grants:		
10,000	Administrative Staff Training	10,000	
	Departmental and Laboratory		
250,465	Maintenance	294,862	
31,070	Academic Services	6,691	
94,855	Repairs and Maintenance of Building	49,949	
72,928	Minor Works	129,796	
8,063	Student Vacation Grants	4,155	
7,780	Miscellaneous	5,587	
	Development Programme:		
41,694	Relocation and Other Costs	41,694	
(516,855)			542,734
(2,888)	Minor Building Projects		(4,161)
3,113	Small Group Teaching (earmarked funds)		2,938
13,820,454			17,266,262
43,318	**EXCESS OF INCOME OVER EXPENDITURE FOR THE YEAR**		118,056
£13,863,772			£17,384,318

	ALLOCATIONS FROM RESERVES AT 1 AUGUST 1975		
	Revenue Grants:		
10,000	Administrative Staff Training	10,000	
	Departmental and Laboratory		
235,725	Maintenance	250,465	
20,023	Academic Services	31,070	
72,547	Repairs and Maintenance	94,855	
125,713	Minor Works	72,928	
3,953	Student Vacation Grants	8,063	
8,825	Miscellaneous	7,780	
	Development Programme:		
44,000	Relocation and Other Costs	41,694	
(520,786)	Balance at 1 August 1975		516,855
5,011	Small Group Teaching		3,113
13,863,772			17,384,318
£13,863,772			£17,384,318
209,151	Balance as at 1 August 1975		252,469
43,318	Excess of Income over Expenditure for the Year after making allocations (net) from Reserves of £21,543		118,056
£252,469			£370,525

252,469	Balance 31 July 1976 Carried to Reserve	370,525
£252,469		£370,525

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UNIVERSITY COLLEGE LONDON